WITH THE BRAIN IN MIND: A COLLABORATIVE PROPOSAL TO ENHANCE READING TEACHING PRACTICES

MARTHA PATRICIA CORREA THIAN
PATRICIA PÉREZ DÍAZ

UNIVERSIDAD LIBRE DE COLOMBIA

COLLEGE OF EDUCATION MASTERS IN SCIENCES OF EDUCATION WITH EMPHASIS ON DIDACTICS IN ENGLISH AS A FOREIGN LANGUAGE

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With the Brain in Mind: A Collaborative Proposal to Enhance Reading Teaching Practices

Martha Patricia Correa Thian
Patricia Pérez Díaz

Directed by
Vladimir Alfonso Nuñez Camacho

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“Every situation in life is an opportunity to learn”

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Abstract

This study reports a Collaborative Action Research process to develop a collaborative proposal in order to enhance reading teaching practices. The study was carried out with a group of four English teachers at Manuelita Saenz, a public school located in the south of Bogota. Data were gathered through these instruments conducted in different moments: four surveys, four observations and two interviews to the English teachers. Findings revealed that collaborative teaching work is an excellent opportunity to enhance teaching practices because it allows teachers to analyze, reflect and propose strategies in order to face common problems that arise in the daily pedagogical practice. Undoubtedly, collaborative work gave the participants the possibility to grow professionally since the process permitted them to recognize and value each other as a subject of knowledge.

On the other hand, data showed that it is possible to design a collaborative proposal considering the experience and knowledge of the participants as well as contributions of new pedagogical tendencies like Brain /Mind Education to enhance reading teaching practices.

Key words: Collaborative work, professional development, reading teaching practices and Brain/Mind Education (BME), Brain Friendly strategies.

INTRODUCTION

The continuous improvement of the students' learning conditions, their achievement and the development of social skills that allow them to succeed in academic, professional and social settings, has been a great educators' concern. Different pedagogical proposals have been implemented in order to foster teaching practices, in fact, educators are encouraged to support their professional performance based on updated theories and methodologies that help them to reach their objectives. However, most of the time those efforts are isolated and they are enclosed in teacher's classroom, impacting just a group of students. This isolation avoids the mutual professional enrichment since teachers do not share their experiences, therefore their achievements become personal. When teachers share successful teaching practices with one another, they will have a wider base of knowledge to bring to the classroom. A variety of pedagogical approaches will be available, and teachers will have a resource to rely on when they need guidance or advice in effectively teaching students. In this sense, the researchers who carry out this study, have been reflecting on the importance of collaborative teaching work, its impact in teachers' professional development and their pedagogical performance, especially in reading teaching practices.

Following a systematic process, it is necessary to make an overview about important findings provided by current research related to three main domains: First, collaborative teaching work and how it promotes professional development. Second, some studies conducted to enhance reading teaching practices and finally, other ones related to new pedagogical tendencies that may guide teaching performances.

Related to collaborative teaching work, Galini & Efthymia (2010) conducted a study in North-Eastern Greece. In this study participated a university researcher in collaboration with four

kindergarten teachers and four parents from two kindergarten classes. The objective was to introduce internal evaluation processes in the kindergarten within the framework of collaborative work. Data showed that the restricted social cohesion in the classroom, the high rates of teachers' authoritarian practices and parent-teacher collaboration were the basic areas of concern. Internal and self-evaluation processes were important for locating the problematic areas and supported decision-making for action while formative assessment techniques enhanced participation and learning for all members of the community. This study is relevant because it shows how to work collaboratively may contribute to an educational change in a specific context.

Shen & Huang (2007) carried out a research study involving a teacher -researcher, a teaching assistant, and forty-six students. The study focused on how collaborative action research helps teacher- researcher to look for solutions to a problem and how this approach facilitates the learning of reading strategies by students. The process evidenced that both changes to the teacher's teaching and the student's learning resulted from collaborative action research. On the other hand the researchers affirm that the process was a little bit difficult due to the lack of skills for collaboration, the inability to share roles and goals between experts and learners, difficulties in classroom management and motivation. Data pointed out two important aspects to be considered, the first one has to do with the collaboration among stakeholders which makes possible a change, and second, the possible problems to face when a collaborative action research is taking place.

Another collaborative experience was conducted by Savoie-Zajc & Descamps- Bernarz (2007) at University of Quebec Canada. The research compares two studies, the first case was carried out from January 2004 to April 2005 and two groups participated. The first one was composed of six teachers and one assistant principal. The other group comprised eight members,

six teachers, the school principal, and one resource person for special-needs teenagers. Each group met every four to six weeks. The meetings allowed them to identify their professional concerns, define their objectives, plan for future actions, share observations and reflect on their professional experiences. The second case was a group of ten people, three teachers from high school, five from elementary and two mathematics consultants because the objective was to join a collaborative research project on the transition from elementary to high school mathematics. The results showed that individual and collective competencies were strengthened in terms of mathematics' curriculum, common vocabulary and school's mission. Both groups appreciated the space offered to reflect on their professional practices in order to challenge them to think about ways to improve their practices. Participants affirmed that working in group, provided support and contributed to the richness of the experience. This study is very useful to demonstrate how collaborative work enhances teamwork and provides opportunities to grow as professionals.

Regarding the importance of reading teaching practices, Ladrón de Guvard (2011) carried out an experimental study with primary school students in Chile. His purpose was to demonstrate if reading comprehension process is improved when the students are faced to read texts related to their social and cultural environment. It is concluded that contextualization enhances their reading comprehension process. Furthermore, Amado & Borzone (2011) made a research that allowed them to conclude that the level of Spanish rural students reading comprehension process is higher when they read texts that are related to their environment, such as customs, traditions, uses, activities of their community, local biodiversity among others. Meanwhile this process is lower when the texts are lack of this contextualization. These two studies evidence the importance of connecting the context to the texts in order to achieve a meaningful reading comprehension process.

Reading teaching practices influence directly students' reading comprehension performance. In Medellin, Echeverri & McNulty (2010) report an action research project addressed to eighth graders from a public school. It intends to test foreign language reading comprehension using a directed reading-thinking approach with strategies for comprehension and application. The strategies were prediction, prior knowledge, graphic organizers, and questions. Data analyzed included participants' perceptions of the usefulness of the strategies and students' work on the graphic organizers and reading worksheets. Findings showed that participants thought the strategies and an interactive reading task improved reading comprehension. The majority of students used English to answer knowledge, comprehension and a good number of application questions.

Another related study was done by Espinoza (2010), who used the reading strategy called as its acronym in Spanish LIDE (read, inquiry, declare and explore) as a way to enhance primary students' reading comprehension and their motivation. This technique only uses expository texts and it has five steps: First, students make a brainstorm about a question that was strategically prepared before by the teacher taking into account the topic of the text. Second, the students receive a text with a specific purpose: they have to find some mistakes. Then, the students discuss about their findings. They have to come to some agreements about their discussion. Those conclusions are written in the board. Next, they receive the corrected text in order to students realize if they are right or wrong. In this way, the students feel motivated when they are reading. They are encouraged to use critical thinking, they can compare and contrast different points of view and finally they can assess their comprehension through a comparative reading strategy.

In recent years educators have explored the relation between classroom teaching and emerging theories about how people learn. Discoveries in neuroscience have presented new ways of thinking about the brain, the human neurological structure and how the connection between perceptions and emotions can contribute to learning process. In this sense Brain/Mind Education arose as a dynamic relation between Neuroscience, Psychology and Pedagogy to inform teachers' understandings about teaching and learning to help them to make better decisions in their daily pedagogical practices.

The following researches have been carried out in order to analyze the effectiveness of Brain Mind Education in different fields: Saleh (2011) conducted a quasi-experimental research called "The Effectiveness of the Brain-based learning Approach in Generating Students' Learning Motivation towards the Subject of Physics: A Qualitative Approach". This quasi-experimental research approach involved a sample constitutes 100 students: 50 in an experimental group and the other 50 in a control group, randomly selected from two equivalent schools. She intends to figure out how the use of Brain based Education increases motivation. The findings of this study showed that the Brain based module was an effective teaching approach in dealing with the issue aforementioned. It was found that students who followed it, possessed a better physics learning motivation compared to students who received conventional teaching method.

Duman (2010) investigates the effects of Brain/Mind Education the academic achievement of students with different learning styles. The study group consists of 68 students from the department of Social Sciences Teacher Education in the Faculty of Education at Mugla University. In the study, a pre-test-post-test experimental design was used. Data were collected by using academic achievement tests and the Kolb's Experiential Learning Style questionnaire.

The findings of the study revealed that the BME approach used in the experimental group was more effective in increasing student achievement than the traditional approach used in the control group. The most important implications of this study are that Brain/Mind Education made similar positive contributions to the academic achievement of the students with different learning styles. Brain/Mind Education used in the present study made positive contributions to the achievement both in the integrated whole-class activities and teaching activities individualized according to different learning styles.

It is very important to realize how theory and practice must have a real coherence. In this way Radin (2009) conducted a qualitative research in two phases: Phase I involved interviews with renowned theorists in brain-compatible instruction, and Phase II involved interviews with practicing teachers. The ten theorists interviewed in Phase I possessed varied educational levels and career paths. Their areas of expertise ranged from neuroscience, biology, and psychology to educational applications of brain research. Meanwhile, six secondary teachers interviewed in phase II Rocky Mountain state. His main findings were how the interacting components of neuroscience, combined with cognitive science, educational psychology, biology, and educational research, can validate good teachers' practices and motivate other teachers, including pre-service teachers, to begin to articulate their skills. It is stated that Brain/Mind Education is essential for optimal learning; educators at all levels, preschool through higher education, need this component to round out their conceptual framework.

From these studies, some conclusions are drawn, first if a teacher is part of a community of sharing, that teacher is more likely to value the benefits of the support and knowledge that is created in that community. The teacher who values collaboration, sharing, and peer-oriented learning will make the effort to create a similar community within their classroom. A community

of sharing within the classroom allows students to feel safe sharing ideas, concerns, challenges, and successes with peers. Second, a collaborative, systematic and organized teaching practice promotes a more effective students' reading comprehension process. Finally, Brain/Mind Education may guide teaching practices by using findings of the brain research in benefit of the learning process.

The reflective overview aforementioned, came from the necessity of finding a general background related to the specific problematic situation detected at Manuelita Saenz School following this process: first of all, there was an initial researchers' concern related to students' reading performance. To understand better the institutional context with respect to English reading, a survey was addressed to the academic coordinator, in order to have a general idea about English subject and specifically in reading. Data showed that there is an organized English program according to the criteria given by the institution, however she claims that it is necessary to implement an institutional English reading project, due to the unexpected national and institutional test results. Besides, she considers that students have low motivation towards reading. (See annex 1)

To contrast the information given by the coordinator regarding to English program, students' performance in Pruebas Saber and institutional tests and the low motivation of students, it was analyzed the English program and it was found that it is divided in themes and functions according to each course. It specifies some general criteria in terms of methodology and evaluation, nevertheless, there are not specific criteria to guide English reading teaching practices (See annex 2).

Analyzing Pruebas Saber 2014 and Institutional tests, the results were not the expected. (See annex 3). Another survey was conducted to students in order to know their

perception. Students state that they like English class even though teachers do not innovate in their activities. In terms of reading, they say that they enjoy reading, but it is difficult for them to comprehend a text because of their lack of vocabulary and mispronunciation, furthermore they think that teachers use bored and difficult activities and they have different ways to teach reading. (See annex 4)

At this point it was necessary to aim a survey in order to know teachers' voice about reading. The results show that they recognize reading as a complex process that must be fostered, however in their practice they emphasize on oral skills. Regarding reading process, educators use different reading activities mainly on pre-reading. On the other hand, there is no evidence of a clear and unified process to teach reading. (See annex 5)

In this way, it is found as a SCIENTIFIC PROBLEM the unarticulated work among teachers that is evidenced in the lack of organized, clear and purposeful reading teaching practices. From this specific problem, it is arisen a SCIENTIFIC QUESTION that intends to guide this research process: How could a teachers' proposal be to enhance reading teaching practices at Manuelita Saenz school? Once the scientific problem is defined, it is essential to support theoretically this research on these specific issues: Collaborative Work, Professional Development, Reading, Brain/Mind Education, and Brain Friendly Strategies.

It is very difficult for teachers to share their knowledge, their experiences and even their fears, most of the time they work in isolation. In this sense, collaborative work becomes a powerful strategy to encourage teachers to reflect on their concerns and to find common alternatives of problem solving that allow them to recognize each other as a worthy contributor. Collaborative work supposes the joint of a group of people to work together to achieve common purposes. Diaz (2004). Collaborative work also provides opportunities to professional growth, Lassonde defines professional development as the "participation in opportunities that result in the

acquisition of new knowledge, understandings, skills, or strategies that enhance and build upon current knowledge." (2009 p. 6). During the professional development process from a collaborative perspective, the experiences, the knowledge, the conception of the world that teachers have, are valued in order to generate a process of positive interdependence.

Considering that the stated problem is related to the lack of common criteria in reading teaching practices, it is crucial to define reading and reading teaching strategies. Reading is a process through which a student learns to understand the language and to communicate by means of it. It gives students the opportunity to access new knowledge and develop more complex thinking processes because it requires higher order thinking operations. Some people believe that reading is a matter of giving sounds to the letters that are written on a paper (decoding), but reading goes further. "Reading is a complex process of problem solving in which the reader works to make sense of a text not just from the words and sentences on the page but also from the ideas, memories, and knowledge evoked by those words and sentences."(Cziko, C, Greenleaf. C, Hurwitz. L, & Shoenbach. R. 2000, p.38) This point of view suggests that reading is an intentional and interactive process because when a person reads, he/she must take into account not only the words but the context of the text, the voice of the writer and relate this information to his/her own experiences to understand the text as a whole. Reading strategies are effective teaching strategies to enhance reading in the classroom such as prediction, thinking aloud, text structure, visualization, summarizing, among others (Duke and Pearson 2002, p.215).

Based on the fact that reading is a complex process that requires high order thinking skills, it is important to take into consideration the role that the brain plays in this specific process. According to Meyer & Rose (1999) "Neuroimaging research has shown that many parts of the brain comprise the brain's reading network: each major area plays a different role, bringing

a different “skill” to the cooperative process”, which means that when reading process is taking place, many parts of the brain are involved and each one of them makes its contribution to success, in other words reading is a whole-brain activity.

Bearing in mind the previous information, improving reading is a way to encourage students to think in a high-order level in such a way that their brain becomes more active and develops better strategies to learn. It is essential to understand that the brain can be developed which means that each time that a person develops activities that demand high cognitive processes, the brain activates high-order thinking skills that promote the growth of the “nerve fibers that connect the neurons (dendrites)”(Willis, 2008, p. 3).

Education has found in neuroscience a great source of relevant material to be applied in order to obtain better results in daily pedagogical practice. It is not enough to know how the brain works, but also how the learning process occurs to provide teachers with tools to use this knowledge to teach properly and help students to learn better. In words of Jensen (2008, p. 4) “Brain-based education is best understood in three words: engagement, strategies and principles. Brain-based education is the engagement of strategies based on principles derived from an understanding of the brain.” In this sense, Brain/mind Education encourages teachers to learn how the brain functions and how a person can learn in a better and efficiently way, to apply this information while they are planning and teaching every day. It is to teach bearing in mind the brain. Improving reading is a way to encourage students to think in a high-order level in such a way that their brain becomes more active and develops better strategies to learn.

Due to the importance that brain has in learning, it is essential to look for strategies that take advantage of brain potential and use it in benefit of the learning process. In this sense, Willis (2008) indicates the value that brain research has had in education field, arguing that the data

obtained through neuroimaging have contributed to propose more effective teaching strategies that enhance the learning process, this kind of strategies have been called: brain friendly or compatible strategies (p.3).

This overview allows to narrow this research in terms of OBJECT OF STUDY as collaborative teaching work and the FIELD OF ACTION as reading teaching practices. Besides, to establish the OBJECTIVE of the research: To develop a collaborative teachers' proposal to enhance reading teaching practices at Manuelita Saenz School.

To guide this research process, three RESEARCH QUESTIONS are established:

- What are the current reading teaching practices at Manuelita Saenz School?
- What could the theoretical support be to inform collaborative teachers' work and reading teaching practices at Manuelita Saenz School?
- How could a collaborative teachers' proposal be to address reading teaching practices at Manuelita Saenz School?

To answer these questions it is relevant to achieve the following SCIENTIFIC TASKS

First, diagnosis and analysis of the current reading teaching practices at Manuelita Saenz School. Second, setting the theoretical framework about collaborative work and reading teaching practices. And third, design of a collaborative teaching proposal to enhance reading teaching practices at Manuelita Saenz School.

With the purpose of making real this research study, it is selected a METHODOLOGICAL DESIGN based on Collaborative Action Research that according to Burns (2001) is a process that "strengthen the opportunities for the results of research on practice to be fed back into educational systems in a more substantial and critical way. Collaborative

action is potentially more empowering that action research conducted individually as it offers a strong framework for whole-school change"

This project has a qualitative approach since it intends to describe how collaborative teaching work may enhance reading teaching practices in English at Manuelita Saenz School. According to Mills (2007) a qualitative research "uses narrative, descriptive approaches to data collection to understand the way things are and what it means from the perspectives of the research participants" (p.4). It is important to take into consideration that this kind of research supposes a process to carry out the project. Data will be collected through these instruments conducted in different moments: three surveys, four observations and two interviews to the English teachers.

The CONTRIBUTION of this study is to encourage English teachers to work collaboratively and to reflect upon their own pedagogical practices related to reading comprehension. First at all, the importance of being coherent between the academic and pedagogical knowledge and the practice itself. Second, the need of working as a team using the same criteria to achieve common goals. Third, the design of a teachers' collaborative proposal to enhance reading teaching practices. Finally, this research process will contribute to strengthen the English Teachers teamwork through a permanent professional development and the design of new methodologies to improve their teaching practices.

CHAPTER I

Theoretical Framework

Bearing in mind our scientific question: How could a teachers' proposal be to enhance reading teaching practices at Manuelita Saenz school? The following figure shows the main theoretical constructs that support this study: (figure 1)

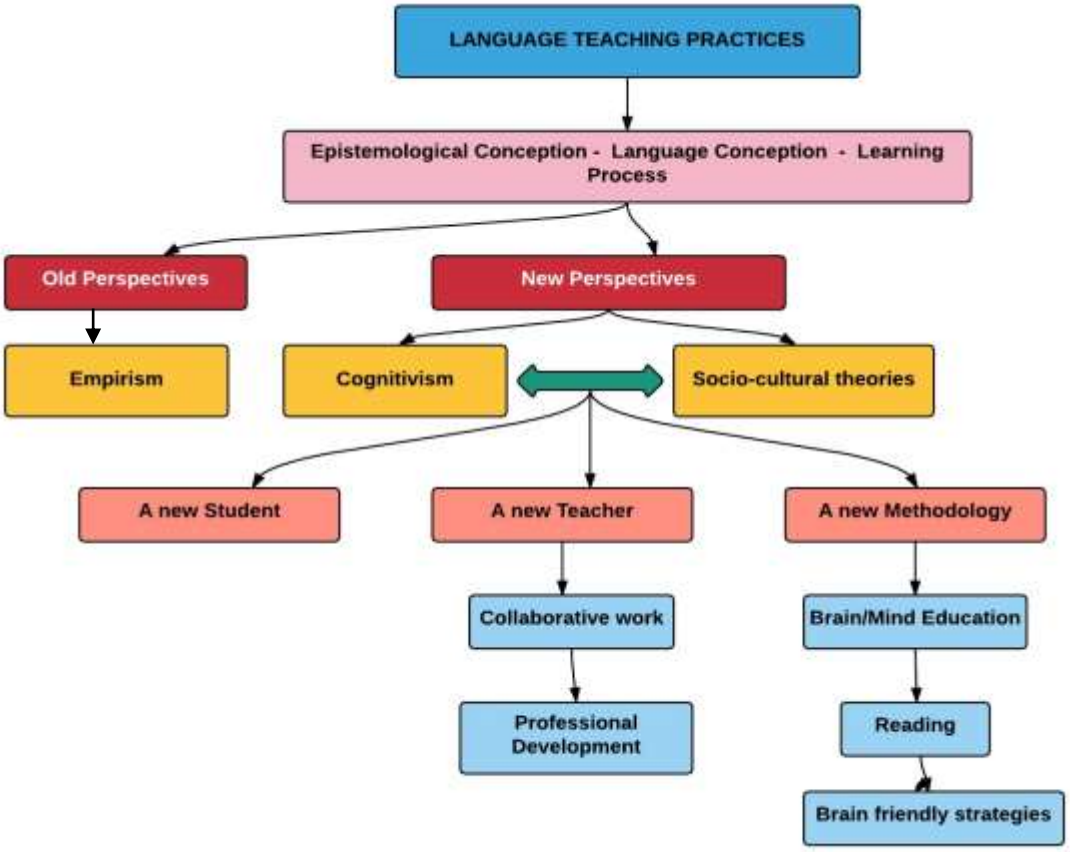

Figure 1. Main theoretical constructs

1.1. Language Teaching Practices

As starting point, it is essential to make an overview related to how language-teaching practices have been evolved, considering the old and new perspectives in terms of their epistemological conception, the concept of language and their implications in language teaching.

Language is the core of language teaching, for that reason language teachers permanently reflect on what language is. This concept has been enriched by the contributions of the sciences as psychology, philosophy and even the neurology. The understanding of this notion influences the teachers' planning, classroom pedagogies, the way they interact with students and the environment they create to facilitate the learning process.

Teaching and learning languages have been influenced by the duality between Empiricism and Mentalism. At the end of XIX century, the beginning of XX the disappearance of the Amerindian tongues, encourages to the linguists to compile data on those tongues in terms of their structure. This idea comes from Ferdinand de Saussure (1985) who, according to his theory of Structural Linguistics, considers the language as a system in which its elements are interrelated to form structures. Saussure is interested in the system (the tongue) and not in the particular manifestations of the tongue (the speech). Later, Bloomfield (1984) from the Empiricist perspective gathers and systematizes the analytical procedures to study the structure of the tongue. The Structural Linguistics is linked to Behaviorist theory. This theory states the conditioning as basis of learning, the systematic acquisition of habits and the importance of the environment over the organisms.

In this way, language teaching involved just teaching vocabulary and grammar rules for constructing new sentences. Reading and writing were more important than listening and speaking, the only listening-speaking activity was reading sentences aloud that would be translated. Consequently the learner was seen as an empty and passive actor, who needed to be filled up with teacher's knowledge.

The mentalism appears to oppose to those ideas that give no importance to the mind and its procedures. Related to language, Noam Chomsky (1965) states that the analysis of the tongue is incomplete if its observable elements are not studied. He talks about the Deep Structure of the

tongue to explain an abstract structure that contains the meaning. In his theory, Chomsky points out that the acquisition of the first tongue is an innate process, because the child has a kind of universal grammar that will be developed in the environment in which the child lives, in this sense the organism is first, then the environment. Although Chomsky emphasizes his theory in the study of the linguistic competence, he offers the basis for a theory of cognitive process for the actual use of the language.

It is the view of Mergel (1998) that the cognitivist theory is based on thought process behind the behavior. It means that the theory occurs inside the learner's mind consciously. This theory focuses its studies on how people think, understand, and know. Cognitivism studies how mental process could influence the individual's emotions and behavioral responses. Cognitivist theory involves the study of mental processes such as sensation, perception, attention, encoding, and memory.

In the light of cognitivism, the language learning process requires by the one hand, mental processes and on the other hand, interaction to scaffold new knowledge in a specific context.

A new paradigm emerges between the aforementioned perspectives: The Sociolinguistics. Related to this, Habermas expands the term of competence into a communicative competence, even though it is still an ideal communication; his studies begin to revise speech rather than grammar. (1970). Equally important is Hymes who completes the meaning of Competence saying that it has both characteristic together: the knowledge and the ability to use it. Besides he involves in his theory important elements as affective and volitive factors, which are significant parts of the language use. (1971). In this way, the concept of language evolved till an understanding of language as Shohamy states: 'open, dynamic, energetic, constantly evolving and personal' (2007, p. 5) that encloses the rich complexities of communication: language is not simply as a body of knowledge to be learnt, but it is a social practice in which people participate

actively expressing, creating and interpreting meanings to establish and maintain social and interpersonal relationships.

The understanding of the language as a social practice necessarily changes what happens in our language classrooms, where teachers need to ensure that students are provided with opportunities to go beyond, taking into account unplanned and unpredictable aspects of language, developing students' language awareness that Tomlinson states as "a mental attribute which develops through define language paying motivated attention to language in use, and which enables learners to gradually gain insights into how languages work." (2003, p. 251). Therefore, teachers enhance language learning through the creation of meaning considering students' background, using engaging and meaningful activities and touching them at a personal level.

As a result the teacher is not the only responsible of educational practice. It is also expected that teachers have an informed knowledge of new methodologies and foreign language teaching. However these understandings are not enough. It is demanded that language educators support their pedagogical practice bearing in mind a language learning theory that leads their decision inside classrooms. Kramsch (1994) notes that: 'talk about talk is what the classroom does best and yet this potential source of knowledge has not been sufficiently tapped, even in communicatively oriented classrooms'. The emphasis on continuing investigation and analysis assumes that learners are involved in learning which promotes exploration and discovery rather than only being passive recipients of knowledge as it is transmitted to them by others.

Language is a social practice, people use language for purposeful communication. Understanding a new language involves learning how to use words, rules and knowledge about language and its use in order to communicate with speakers of the language. This concept of language sees a language not simply as a body of knowledge to be learnt but as a social practice in which to participate (Kramsch, 1994). Therefore, language is 'in' rather than 'alongside of'

society, and inseparable from it. Learning is also a social process; the environment, or setting where education takes place is a social institution, and knowledge is transmitted in social contexts through specific relationships.

1.2.**New Pedagogical Commitments.**

his new paradigm of language teaching requires a new student, a new teacher and new methodologies that provide a better context to teach and learn a language. In this way, language learning must be seen as a constant interaction between students that become them into active actors of this process. From this perspective, students must develop social skills that allow them to build up knowledge with others. Craig et al suggest that "Whole student learning is based on the premise of engagement in learning relationships with connection to others as key to opportunities for deep learning" (2010, p. 6) Therefore, the most important Educational objective is to foster these inter-related characteristics: self-awareness, consideration of others, connection to others, and impacting change and extends their application to a college population and context. Even though, we are aware of the importance of reflecting students' role in the teaching and learning process, for this specific case, we will focus on teachers' characteristics and how their pedagogical practices impact on this process.

1.2.1. **A new teacher.**

As it was stated before, the socio-cultural paradigm requires a new kind of teacher who can see the learning process widely. It is quite necessary to conceive the language teaching practices as a social construction too. Unfortunately, teachers have worked in isolation. Educators view their classrooms as their personal domains, have little access to the ideas or strategies of their colleagues, and prefer to be left alone rather than engage with their colleagues or principals. Their professional practice is hidden in a veil of privacy and personal autonomy and is not a

subject for collective discussion or analysis. Besides schools do not offer infrastructure to support collaboration or continuous improvement. This situation will not change by merely encouraging teachers to collaborate, but will instead require embedding professional collaboration in the routine practice of the school.

"Paradoxically, although teachers by definition spend their lives in the company of others, it is in many ways a lonely profession" (Wallace, 2006, p 207).It is very hard for teachers to share their knowledge, their experiences and even their fears, most of the time they work in an isolated way. This isolation gives them a sense of security, because they can totally rule their classrooms in terms of the content, the way they teach, the way they behave and the way they relate to their students. On the other hand, sharing teaching experiences has been related with the word 'supervision' facing teachers with others who can invade their professional environment making them feel uncomfortable and insecure. This situation has not allowed to create pedagogical settings in which teachers can grow together and look for an improvement of their educational reality which is related directly to professional development. Nowadays, collaborative work has been focused on students, however, it is relevant to consider the impact it could have in the teaching practice field in order to foster teachers teamwork giving them the opportunity to share their ideas, their personal achievements, their knowledge and their weaknesses to have a real view of main issues of their institutions and take common actions to improve together and teach better.

1.2.2. **Collaborative Work.**

Nowadays, collaborative work has been centered on students. However, it is possible to take advantage of its principles to enhance teaching practices. Collaborative work includes the

participation of a group of colleagues (collaborative team) with a common objective and the will to find alternatives to face problematic situations that arise from daily teaching practice.

Collaboration is a part of many relationships in teaching. Nunan (1992) lists teachers, learners, researchers and curriculum specialists as just some of the people who work together in schools. Hargreaves (1995. p. 150) extends the term of collaboration to the teaching practice and describes it as a principle of 'action, planning, culture, development, organization and research'.

Armstrong (1977) indicates five benefits of use collaborative teaching: First, collaborative teaching work allows to take advantage of each teacher's talents. When every member of a teacher's team shares their strengths in planning, developing and evaluating learning process, it will be enriched not only with different points of view, but different knowledge and methodologies and ways of solving daily classroom problems. Another benefit is to encourage teachers to be more creative, because they build a mutual commitment to teach together. Another improved process is the individualized instruction, because it is possible that educators create learning environments in which students and teachers have better and personal contact and engagement. Pacing instructions can be organized more effective, due to this process should be monitored together. To close, Armstrong suggests that a collaborative teacher work allows to make an improvement of the programs by the continuous reflections of what they know, learn and evaluate. In addition to these benefits, Hargreaves (1994) includes moral support and increased efficiency. In effective collaboration, moral support can help educators to lead to and to deal with the teaching problems that learners sometimes present. It can give teachers a wider range of teaching options. Efficiency is increased as teachers working in the same area avoids unnecessary duplication of effort.

Collaborative work includes the participation of a group of colleagues (collaborative team) with a common objective and the will to find alternatives to face problematic situations that

arise from daily teaching practice. Díaz (2004) summarizes the main characteristics of collaborative teams, beginning with cooperation as a value. The members of the group are encouraged to support, challenge and assess each other to find alternatives to grow up together. Another characteristic is the heterogeneity of the team. Each one could have a different level of expertise which allows to acknowledge the difference as a key element in the professional development. A positive interdependence is the most important characteristic of a collaborative team because it makes team members aware of how their actions may affect positively or negatively to the whole team. This characteristic is totally lied to the accountability of each one of the team members. In this sense, the teamwork makes a coherent group that supports each other being more productive and effective. The simultaneous interaction allows to attend the teachers and students needs at the same time, giving all members opportunities to participate in equal conditions in order to reach agreements together. As a final characteristic the author proposes that each member of the team must learn the core of cooperative skills to succeed as a group. (p.26)

Collaborative teachers work requires some stages to consolidate a successful process that assures a professional growing, an advance in students learning and an improvement of the institutional environment. Piggot (2012) proposes five levels of collaboration to be followed by the collaborative team. The first one is introduction where participants seek and enjoy exploring common objectives. It is collaboration in a superficial and task-specific way. The next level is called recognition of potential of self and others. Here, participants are aware of the different characteristics between self and others. The aim is to increase willingness to participate sharing different perspectives of the reality. During this process a new level arises that is the gaining and inquire perspective. In this moment the empathy for the perception of others has increased and as a result a genuine acceptance arises. The fourth level has to do with the transition to collaboration

where the members of the team suspend his/her viewpoint so that they open up to unknown other perceptions allowing the exploration of creativity through inquiry and collaborative actions. In the final level, participants achieve new levels of awareness, they are encouraged to express and take action. This process is called: trust and co-generation. It is characterized by spontaneity, synergy, creativity, openness, trust and learning. (p.94)

Dufour & Dufour (2002) state some characteristics that collaborative teaching work must have: As most of the teachers have made their pedagogical practice in isolation, like independent actors and schools have not opened spaces in which they can share each other as professionals, it has been very difficult to become them into collaborative teachers. That is why, educators must make the first step forward. It should be a professional initiative that leads a new way of thinking and working. From isolation to collaboration. In this way, Dufour & Dufour (2002) propose that the first stage is to involve collaboration into daily pedagogical routine and practices, then it is necessary to create some parameters to ensure that the collaboration is focused on improving learning and as a result in the teaching practice. Educators are encouraged to focus on learning rather than teaching.

When teachers are willing to work together with the main goal of improving students learning, they feel a mutual responsibility that guides their pedagogical practices, and they can make collective decisions in order to achieve actual students' learning. As Dufour & Dufour (2002) summarize "the very essence of a learning community is focused on a commitment to the learning of each student". These collaborative teachers work interdependently to achieve common goals. These goals have been established previously taking into account the students' learning, so that the word 'collaboration' means that educators try to impact their school practice to achieve better results.

Consequently, teachers' efforts must be concentrated on results rather than activities. Here the collective achievements are more important than individual ones. The school is seen as whole educational body that should grow and support each other. However, some policies have made that teachers are just concerned on creating a variety of non-articulated activities that are not connected to institutional efforts and achievements.

Furthermore, this process requires that teachers reflect permanently on their reality. The educational environment is their point of departure. This reflection should include their pedagogical practices and the results they achieve through them hence, educators will have a real awareness of their reality, so they can lead their teaching process based on the genuine and objective scope, rather than on personal opinions.

As one of the main characteristics of the collaborative teachers work is the commitment of a continuous improvement. This kind of work encourages teachers to grow together, but not being a passive actor, it is quite important that educators assume this process in a creative, organized and active way, due to each one is as responsible for the colleagues' professional developments as themselves. Here the word 'Professional Development' has a new dimension, that it is not based on readings, courses, and programs out of school reality. It is a mutual construction that makes participants better educators who achieve a great common goal: Students who learn effectively.

1.2.3. **Professional Development.**

To abandon the idea of working in isolation could be the possibility of growing up as professionals. Creating a space to share experiences, ideas even the fears, may enrich teaching environment by building up collective knowledge in order to foster the institutional work in benefit not only of the students but the teachers too.

One of the professions that requires a permanent growing is teaching, since it is a dynamic process which is been continuously reflected on. It is an everyday teachers' commitment to be updated with their profession's demands through an accurate professional development that fulfill those needs. Lassonde & Israel define professional development as the "participation in opportunities that result in the acquisition of new knowledge, understandings, skills, or strategies that enhance and build upon current knowledge." (2009, p. 6)

However, in order to design and implement an accurate professional development process, it is relevant to consider some aspects. Díaz (2004) states eleven issues which professional development has to face. (p.2). Generally, professional development has been designed by administrators and consultants rather than teachers in a top-down decision making. This perspective has been apart from teachers' views and most of the time has not corresponded to real institutional needs. Another point of view claims that teachers do not know how to teach, therefore the students do not learn, that is why panacea programs are designed to provide definite solutions to that problem. Those programs are based on new methodologies without considering the real and specific contexts in which they are going to be applied. A third issue has to do with the lack of ownership of the professional development process and its results, due to the inconsistency between what teachers look for and what they gather. The fourth problem is related to the technocratic nature of professional development content, in which teachers must apply strategies previously designed. It is supposed that these strategies are effective but are difficult to implement. The fifth one is the universal application of classroom practices, regardless how different students are. Problem number six is the lack of variety in the delivery modes of professional development, the same approaches are used to instruct teachers without taking into account their differences, needs and expectations.

Next concern is related to the inaccessibility of professional development opportunities because of the lack of time or money and sometimes the difficulty to find the program that fixed to teachers' needs. Another obstacle that should be overcome is the little or no support in transferring professional development ideas to the classroom, it is quite difficult to build a bridge between theory and practice and even more when the respective support does not exist. The following difficulty presented by the author is the standardized approaches to professional development that disregard the varied experiences of teachers, in this sense teachers' knowledge and experiences has been sub valued and they have not seen as a point of departure to scaffold new knowledge. The lack of systematic evaluation of professional development is one the biggest challenge to be overcome. Those programs need to be evaluated in order to find out their weaknesses and strengths and their real validity. Finally it is quite important to take into account the teachers' learning differences to design effective and highly impact programs.

With the aim of overcoming the issues stated previously, Griffin (1997) points out six characteristics of an effective professional development program. First, it is necessary a purposeful and articulated program that fulfills the needs teachers have detected, therefore it should be focused on students' context, school curriculum and what society demands. The second one claims that the program must be participatory and collaborative, in other words teachers' experiences must be valued as a source of useful knowledge to lead processes of changing. Another key aspect is the theoretical support and the researches carried out by experts in and out the classroom. An effective professional development program combines theory and practice to find the answer to the teachers' concerns, motivation and interests. The fourth characteristic demands that the program should be an ongoing process that emphasizes on what and how to teach a subject inside of the school curriculum. That is to say that a teaching professional development program has as its main goal the improvement of didactics of each area of

knowledge. As the fifth one, the professional development program must be developmental. In this sense, the implemented actions are not apart from the daily pedagogical practice, they are continuous and totally integrated to classroom dynamics, and therefore professional development requires a systematic support through a permanent feedback, an individual and collective reflection. Finally, the professional development program must be analytical and reflective. It must be assessed to determine its impact in the teachers' learning, in students' learning and in the whole educational community.

This overview provides a new perspective of what it is possible to do in terms of professional development in the school context, where teachers' collaborative work can foster their practice and contribute to improve students' learning process. In this part the concept of collaborative work appears like a light that can guide the professional development process since it gives opportunities to interchange their pedagogical experiences, to design and evaluate their teaching process, to make didactic material to support students' learning and to build up new ways of teaching in a collaborative and cooperative work.

1.3. **A New Methodology**

Being cognizant of learning process is a social construction, where students are the center of the process and the teacher is who creates the necessary conditions to learn, it is required methodologies that harmonize with this conception so as to build a bridge that reduces the gap between what teacher knows and what teacher does (theory and practice).

1.3.1. **Brain/Mind Education.**

Education has found in neuroscience a great source of relevant material to be applied it in order to get better results in daily pedagogical practice. It is not enough to know how the brain works, but also how the learning process occurs, in order to provide teachers with tools to use

this knowledge to teach properly and help students to learn better. According to Jensen (2008, p. 4) "Brain-based education is best understood in three words: engagement, strategies and principles. Brain-based education is the engagement of strategies based on principles derived from an understanding of the brain." In this sense, Brain-based education encourages teachers to learn how the brain functions and how a person can learn in a better and efficiently way, to apply this information while they are planning and teaching every day. It is to teach bearing in mind the brain.

Brain-based learning is based on two main columns. By the one hand, teachers have to design enrichment and appropriate strategies similar to real life in which students are involved; at the same time, they have to assure that students process the information through meaningful experiences. Consequently, the most important aspect is that the teacher and the students look for meaning, because when a person connects every experience with his/her life and emotions, he/she achieves a real comprehension rather than a simple memorization of a fact. That is why it is very important to work on developing the brain skills meanwhile developing learning skills. To have a better understanding of this process, it is necessary to know about the 12 principles for Brain-based learning proposed by Caine and Caine (1994, p.2) who have defined brain-based learning as the immersion children in multiplicity of complex experiences, both authentic and fantastic and then provision of a number of ways for them to process those experiences, including reflection, critical thinking, and artistic elaboration. These principles help teachers not only to understand how the brain works but how they can guide every effort to get better results. As they emphasize:

"The great challenge of brain research for educators does not lie in understanding the anatomical intricacies of brain functioning but in comprehending the vastness, complexity, and potential of the human brain… We offer the following brain principles as a general theoretical

foundation for brain-based learning. These principles are simple and neurologically sound. Applied to education, however, they help us to re-conceptualize teaching by taking us out in defining and selecting programs and methodology" (p. 66)

As educators it is essential to learn more about how the brain works in order to use this information to strengthen teaching practice to help students learn. Learning about brain functioning is fundamental to build more effective strategies so that students can transfer their learning into long term memory. To link neuroscience and education Caine and Caine (1994) suggest the following principles (p. 4):

Figure 2. Brain/Mind Principles proposed by Caine and Caine (1994)

1. All learning is physiological. The brain is a living system. Everything is connected in multiple ways to everything else. Integrated lesson plans are necessary for effective teaching. Everything that affects the physiological functioning affects the capacity to learn. Stress management, nutrition, exercise, and relaxation, as well as other facets of health management, must be fully incorporated into the learning process. As many drugs, both prescribed and

recreational, inhibit learning, their use should be curtailed and their effects understood. Habits and beliefs are also physiologically entrenched and therefore resistant or slow to change once they become part of the personality. In addition, the timing of learning is influenced by the body and brain natural development as well as by individual and natural rhythms and cycles.

2. The brain/mind is social. Social interaction is very important and has a great impact on learning anything. Therefore, it is necessary to encourage students to participate actively in group activities. The learning environment needs to provide stability and familiarity, which is part of the function of routine classroom behaviors and procedures. At the same time, provision must be made to satisfy the curiosity and hunger for novelty, discovery, and challenge. Lessons need to be generally exciting and meaningful with an abundance of choices. The more positively like real life such learning is, the better. Programs for gifted children often take these implications for granted by combining a rich environment with complex and meaningful challenges. These creative methods used for teaching gifted students should be applied to all students.

3. The search for meaning is innate. Human beings want to learn from since they have been born. But what they have learnt comes from what they have experienced and have a meaning for them. Teachers need to provide a variety of materials and have brainstorming sessions to allow students to express their opinions and become better thinkers.

4. The search for meaning occurs through patterning. This means that the human being tries to understand his/her life through order**.** He/she establishes categories, comparisons, differences and similarities to explain the world. Teachers need to develop strategies that allow students to build logical schemas to organize the knowledge. Learners are patterning, or perceiving and creating meanings, all the time. Teachers cannot stop them; but they can influence the direction. For teaching to be very effective, a learner must be able to create meaningful and personal patterns.

5. Emotions are critical to patterning. They let people know how significant or insignificant an event is and what values they are capable of placing on it. The more significant an event has, the more a student will learn about it. In a classroom, brainstorming, group discussions and drama evoke emotions and give students ownership. In this way, teachers need to understand that students' feelings and attitudes will be involved in and will determine future learning, therefore in general, the entire environment needs to be supportive and marked by mutual respect and acceptance both within and beyond the classroom.

6. Every brain perceives and creates parts and wholes. A person can organize the information in two ways: to divide the information in parts, segments or to work with whole information. The brain sees curricular segments as wholes and parts. Good teaching necessarily builds understanding and skills over time because learning is cumulative and developmental. However, parts and wholes are conceptually interactive. They derive meaning from and give it to each other. In consequence, vocabulary and grammar are best understood and mastered when incorporated in genuine, whole language experiences.

7. Learning involves focused attention and peripheral perception. The brain not only absorbs what it is aware of, it absorbs information beyond its field of attention. That is why the teacher can and should organize materials that will be outside of the focus of the learner's attention. In addition to noise, temperature, and so on, peripherals include visuals such as charts, illustrations, set designs, and art, including great works of art. Educators should recognize the use of music as a way to enhance and influence more natural acquisition of information.

8. Learning always involves conscious and unconscious processes. Most of the things people know have been learnt in an unconscious way. This process is quite complex. To better develop unconscious learning, students must use their conscious minds well and keep an open

mind to allow new insights to form from unconscious learning. Teachers need to teach beyond facts and require analyzing and problem solving in the curriculum.

9. Humans have at least two ways of organizing memory. The human being has two types of memory. The static memory that stores events, procedures, meanings and feelings. On the other hand there is a dynamic memory that stores and organizes the events moment by moment. It tells us where we are and describe what is happening every moment. Educators are adept at the type of teaching that focuses on memorization. Common examples include multiplication tables, spelling words, and unfamiliar vocabulary at the lower levels, and abstract concepts and sets of principles in different subjects for older students and adults. Sometimes memorization is important and useful. In general, however, teaching devoted to memorization does not facilitate the transfer of learning and probably interferes with the subsequent development of understanding. By ignoring the personal world of the learner, educators actually inhibit the effective functioning

10. Learning is developmental. The brain has its biggest development at aged o of 3, however its plasticity lasts till a person dies. Every new concept must be built upon the known knowledge. Experiences change the physiological structure and operation of the brain. Education should be designed to develop the complex neural networks of the brain through acquiring skills and ideas tied to purpose and meaning**.** As the mind develops cognitively, the scope of learning about a subject expands. It must be done sequentially to allow learning.

11. Learning is enhanced by challenge and inhibited by threat. A low-risk environment prevents the brain from downshifting when it is under stress. People learn optimally when appropriately challenged. Threats, yelling or belittling a student is ineffective. A calm, organized and developmentally appropriate curriculum promotes maximum learning. Teachers and administrators need to create a state of relaxed alertness in students. This state combines general

relaxation with an atmosphere that is low in threat and high in challenge. The teacher must be in this state, and it must continuously pervade the lesson. All the methodologies that are used to orchestrate the learning context influence the state of relaxed alertness.

12. Each brain is uniquely organized. Talents are unique in every person. Some learn best by listening, some by reading and some by using their hands and body. In the classroom, there needs to be a multifaceted curriculum to attract individual interests and to allow students to express their auditory, visual, tactile and emotional preferences. Teaching should be multifaceted in order to allow all students to express visual, tactile, emotional, or auditory preferences. There are other individual differences that also need to be taken into consideration. Choices should also be variable enough to attract individual interests, but doing this may require the reshaping of schools so that they exhibit the complexity found in life. In sum, education needs to facilitate optimal brain functioning.

Caine et al (2009, p.5) suggest that a teacher should be aware of the great capacity a student has to learn. It is his/her main goal to try to lead and address these skills to achieve a successful learning. "Although students will differ based on their background and a genetic and physical makeup, all students can learn more effectively if their innate capacities are seen natural, and are acknowledged and addressed in teaching". In this sense they proposed:

In order to activate these principles in learning process Caine et al (2009, p. 6) suggest three fundamental components or elements to develop an appropriate teaching-learning process. Those are totally integrated and teachers must master them to guide students to a successful learning:

1. Relaxed Alertness: Creating the Optimal Emotional Climate for Learning: It is important that teachers try to create an atmosphere where students feel free to take academic, social and emotional risks. In this way students can learn to think critically and systematically.

As it was stated before, emotions are an important component of brain based learning because it has a great impact on teaching and learning. That is why it is essential to use positive environments that allow the learner to retain subject matter since emotions and thought processes are deeply interconnected. Jensen (1996, p.5) describes a relaxed atmosphere as a place where students find the learning engaging, relevant, complex and challenging, so if the teachers provide opportunities to experience success by eliminating threat, the students will feel valued in the learning process.

2. Orchestrated Immersion in Complex Experience: In an educational environment, it is crucial to generate optimal opportunities for learning. The immersion occurs when students are faced to do meaningful activities, so the classroom must be a place that totally immerses students in every kind of important and significant learning experiences. In this sense, the role of the teacher is to be a creator of an active climate, taking into account how the brain learns and in this way those activities will enhance meaningful learning.

3. Active Processing of Experience: Creating Optimal Ways to Consolidate Learning: In this process students are encouraged to internalize what they have learnt by means of making connections with prior knowledge. Meaningful learning occurs when a student feels safe and enjoys the challenge with unavailable support from teacher. Here it is very important that the teacher takes into consideration that he/she has students with different learning styles, so the activities must be planned to activate and associate the content with their way of thinking and their life. Besides, topics should be related with stories, educational games, crossword puzzles and drama activities that can be arranged to make learning permanent experiences. Finally it is quite important to practice the art of engaging questioning to develop high order thinking skills.

1.3.2. Brain Language Learning.

The concern about how the activity of the brain is connected with learning and how this connection affects teaching and learning process has been researched by some different disciplines recently. In 1970s, the development of the first modern computer and the use of automated robots improved research in many fields, especially in Medicine. In 1980s, it was possible to observe some images in vivo of brain learning. It gave scientists a clear scope of the brain's perceptual, cognitive and emotional functions. With the use of more advanced neuroimaging tools, and the participant of healthy people, many investigations came up giving special focus on learning mechanisms that drew the attention of some teacher practitioners in education.

All of these discoveries led researchers to consider the relationship between mind, learning, language and the brain. Here it is essential to state that the brain is designed to acquire a language. The human brain is genetically programmed for language learning. This programming enables people to form concepts of what they see and experience their thoughts. Recent research confirms that there are brain structures that are genetically specialized for language (Neville & Bruer 2000, p. 164). However, it is important to say that the acquisition of a new language requires that the brain builds up new conditions in order to process this new knowledge. According to Alireza & Seged (2013) in Brain Mind Learning, "the learner is seen as an active participant in the learning process, using various mental strategies in order to sort out the system of the language to be learnt". (p. 56). They establish that it is required to set up some factors where the learner can be immersed in this process. These three main factors are; attention, emotion and memory.

Attention is a discriminative and complex process that accompanies all cognitive processing also it is responsible for filtering information and allocating internal resources to

allow adaptation of the organism in relation to external demands. In order to foster this ability they propose three main items: novelty, because the brain is programmed to pay attention to the unusual situations; the intensity of stimuli because the more powerful is the stimuli, the more a person will learn; and the movement, because when a person is faced to an active situation it can raise the attention of the participant. This aspect helps to motivate students and avoid the habituation.

Emotions are indispensable for learning, hugs, warmth, gestures, flattery, silences and especially direct contact are essential. If there are not positive emotions like love, affection, sense of humor in the learning process, there will not be synergy between the cognitive level and the emotional one, so there will be a great impact in the creative process of socialization. The children should grow up in an emotional relationship of total acceptance through love and affection. The early emotional processes are essential, not only for children grow up healthy, but also these social interactions strengthen the neuronal processes, thereby causing psychological processes such as: memory, learning, perception and higher level thinking.

Memory is a process that allows human being to record, encode, consolidate and store information to be accessed and evokes when it is necessary, in this sense it is essential to learning. Learning a new language involves an active process of storage and retrieval information, it implies that the teachers must teach students how to develop their skills to process information in a systematic way to apply them in their real life.

Definitely, Brain/Mind Education has contributed to enrich the teaching and learning process, that is why, we will go deeper on how this model may enhance reading teaching process focusing on these main issues: A panorama about reading and its possible relations with Brain/Mind Education.

1.3.3. Reading.

Reading is one of the most important abilities that a student needs to develop when learning a language. It is a vehicle through which a student learns to understand the language and to communicate by means of it. It gives students the opportunity to access new knowledge and develop more complex thinking processes because it requires higher order thinking operations. Some people believe that reading is a matter of giving sounds to the letters that are written on a paper (decoding), but reading goes further. "Reading is a complex process of problem solving in which the reader works to make sense of a text not just from the words and sentences on the page but also from the ideas, memories, and knowledge evoked by those words and sentences."(Cziko, C, Greenleaf. C, Hurwitz. L, and Shoenbach. R. 2000, p.38) This point of view suggests that reading is an intentional and interactive process because when a person reads, he/she must take into account not only the words but the context of the text, the voice of the writer and relate this information to his/her own experiences to understand the text as a whole. In other words, for comprehending a text, it is necessary to be a good reader. Good readers have clear goals in mind, they are able to "construct, revise and question the meaning they make as they read" (Duke & Pearson, 2002, p.35) therefore, they can monitor themselves to ensure their understanding

Pressley affirms, "Reading is often thought of as a hierarchy of skills, from processing of individual letters and their associated sounds to word recognition to text-processing competencies". (2002, p.298). It is clear that reading is a process that goes from decoding to the comprehension of a text as a whole. For this reason, it is necessary to foster each one of the reading skills to increase students' understanding of what reading is. Pressley (2002, p.302) also asserts that reading implies different elements to be taught and help the students to increase their reading skills so that, they can really understand a text. Those elements are decoding, vocabulary, world knowledge, active comprehension strategies and monitoring.

Decoding is the ability of recognizing the letters and the sounds they represent, the way as those symbols are joined to form words and sentences. Vocabulary is a key element in reading comprehension. A good reader tends to have a good vocabulary and this useful tool makes easier the understanding of a text. World Knowledge can affect the comprehension of a text. Each reader has a previous knowledge that allows him/her to connect that knowledge with the text, in that way it is crucial to develop activities to activate prior knowledge and generate connections in order to make sense of the text. Active Comprehension strategies are important for readers. Skilled readers use reading strategies to comprehend well a text. They are aware of what they have to do to understand what they are reading, so that they make predictions, make connections between the ideas of the text and their prior knowledge, they reread, make notes, they evaluate their understanding therefore, they do an effective and active reading process. Finally, monitoring is a metacognitive process that consists on self-evaluating the reading process and making decisions to overcome the difficulties that are presenting while reading (Pressley, 2002, p. 306).

With Goodman (1970) a distinction between bottom-up and top-down processing appears to contribute to the teaching of reading. The bottom-up process comes from the print to the reader. It starts with the recognition of linguistic elements such as letters, morphemes, words, sentences in order to understand the text. This process implies a broad knowledge of the language itself, which is not the case for foreign language students. As stated Barnett (1989), bottom-up theory argues that the readers construct the texts from the smallest units (letters to words to phrases to sentences, etc.) and that the process of constructing the text from those smallest units becomes so automatic that readers are not aware of the process. In contrast, in the top-down process, the comprehension of the text begins in the reader's mind, since the reader's background, knowledge and experience could contribute to a better understanding of the text. New tendencies of reading methodologies propose to integrate the two models (bottom-up and

top-down) to address reading process bearing in mind that those processes are essential to comprehend a text. Barnets also points out that readers bring a great deal of knowledge, expectations, assumptions, and questions to the text and given a basic understanding of the vocabulary, they continue to read as long as the text confirms their expectations. The top-down school of reading theory argues that readers fit the text into knowledge (cultural, syntactic, linguistic, historical) they already possess, then check back when new or unexpected information appears.

The integration of the models is called Interactive reading, where the reader uses bottom-up and top-down processes in a balanced way to understand the text. In words of Nuttall (1996) "In practice, a reader continually shifts from one focus to another now adopting a top-down approach to predict probable meaning, the moving to the bottom up approach to check what is really what the writer says" (p.16).

In the interactive reading approach implies that a reader should be an "active participant" in the process of comprehending a text. In other words, the meaning is constructed by the reader, who creates connections between what she/he encounters in the text and what she/he knows about the world as well as about the language. The key element here is the emphasis on the reader's background knowledge. Interactive models of reading suggest that readers reconstruct the text information, based on the text, and on the prior knowledge available to them.

According to Brown (2001) Interactive reading process requires three main phases: Pre-reading, while reading and after reading. The two main functions of pre-reading activities are seeking students' involvement, interest, and motivation, as well as providing language

preparation. Basically, they are a means of incorporating the learners' knowledge of the world, linguistic knowledge, ideas and opinions, before reading the text.

The main goals of the while-reading phase are strategy and skill practice, phase and linguistic development, as well as helping learners to understand the writer's purpose, and the text structure and content. This is crucial stage in the reading process to build up meaning since the activities can help both check comprehension and to develop knowledge of the language..

The post-reading phase helps learners to consolidate what they have read and, at the same time, aims to relate the text to the learners' experience, knowledge, and opinions. To achieve these objectives, researchers (Barnett 1989) have proposed different activities, which contribute to the integration of reading with the other language skills, and which resemble 'real' activities performed by native readers, such as listing facts, summarizing, describing or providing information, as well as discussions, and writing compositions, new versions, or endings. Taking into consideration the importance of reading to acquire and construct knowledge, it is a challenge for teachers to provide students with strategies to improve their comprehension skills and become better readers. Cziko and her colleagues (2000, p. 39) state that good readers are "motivated, mentally engaged and they can coordinate a variety of comprehension strategies to control the reading process" which means that students will become good readers when they monitor their own process of reading, decide and implement the strategies they need to finally understand the text. This self-regulation is called metacognition. Cromley (2005, p. 187) states that metacognition is "the ability to monitor thinking". It is the capacity to analyze the process of thinking and choose the best strategies to ensure learning.

Based on the fact that reading is a complex process that requires high order thinking skills, it is important to take into consideration the role that the brain plays in this specific process. According to Meyer & Rose (1999) "Neuroimaging research has shown that many parts

of the brain comprise the brain's reading network: each major area plays a different role, bringing a different "skill" to the cooperative process", which means that when reading process is taking place, many parts of the brain are involved and each one of them makes its contribution to success, in other words reading is a whole-brain activity.

Bearing in mind the previous fact, improving reading is a way to encourage students to think in a high-order level in such a way that their brain becomes more active and develops better strategies to learn. It is essential to understand that the brain can be developed which means that each time that a person develops activities that demand high cognitive processes, the brain activates high-order thinking skills that promote the growth of the "nerve fibers that connect the neurons (dendrites)"(Willis, 2008, p. 3)

Cytowic (as cited in Meyer & Rose 1999, p.38) learning to read has related to the three systems in the brain: recognition system, strategic system and affective system. Recognition system is very important for reading because the brain recognizes patterns. At the beginning, "patterning is the process by which words are identified by linking the abstract representation in letters (graphemes) to the sound of the words" Willis (2008, p.22). As the reader is becoming expert, patterns turn into more complex too, in order to help him/her to understand a text accurately. The second system has to do with the strategies that a person uses to develop a task. In reading process specifically, good readers monitor their own process and if the process is not accurate, they implement the appropriate strategies to overcome the difficulties. The affective system establishes priorities, to focus attention, to decide what is worthy in a specific situation, these elements are key to comprehend a text successfully.

Bloome (1985) considers reading as a social process with main dimensions: first, each written event involves a social context that teacher must consider. Second reading is a cultural activity where those aspects emerge and are reflected in the reading process. Finally, reading is a

social-cognitive process where students obtain appropriate information, activities and values. They also learn ways of thinking about the world and problem solving skills.

There are many effective strategies to enhance reading in the classroom such as prediction, thinking aloud, text structure, visualization, summarizing, among others (Duke & Pearson 2002, p.215). Prediction is conceived as making anticipations about the reading and corroborating if they are right or not. This strategy has to do with activating prior knowledge to facilitate the understanding of the text. Another strategy is thinking aloud which consists on express reader's thoughts while reading. Text structure is a technique that has to do with the use of inner structure of the text to help the reader to organize the information and relate important ideas within the text. Visualization is a reading strategy that makes possible the visual representation of a text. It is crucial to add that a text is verbal and abstract so a visual representation makes it concrete and memorable for the brain permitting to the reader to present the information in a more tangible way. Summarization is a complex strategy that implies to read the whole text, to determine the order of importance among the ideas and to create a new text using reader's own words that shows reader understands (Duke & Pearson, 2002, p. 220).

Each one of these strategies helps the reader to focus on the meaning of the text and increase the relationships the reader does between the text and his/her own experiences, which will guarantee a better comprehension of the passage. These strategies must be taught and modeled in the classroom so that students can use them independently. "The most effective lessons are those in which the teacher explains and models the strategy clearly, provides time for guided practice, collaborative practice and finally, independent use of the strategy" (Harding-Stricker, 2008, p.4). Accordingly, teachers must create opportunities to implement reading comprehension strategies where students are active participants of the process, where they

observe but also apply this kind of strategies and feel more comfortable when the reading process is taking place.

1.3.4. Brain Friendly Strategies and Reading.

Bearing in mind the importance that brain has in learning, it is essential to look for strategies that take advantage of brain potential and use it in benefit of the learning process. In this sense, Willis (2008) indicates the value that brain research has had in education field, arguing that the data obtained through neuroimaging have contributed to propose more effective teaching strategies that enhance the learning process, this kind of strategies have been called: brain friendly or brain compatible strategies (p.3). There are different brain friendly strategies depending on teacher's purpose. Sprenger (2013) suggests some brain friendly strategies to improve reading comprehension. This author indicates, among others, the importance of reading aloud as a strategy to model how to read a text, teachers should do it frequently because brain has "this innate ability to imitate stems from mirror neurons". (p.148) This type of neurons allow human beings to learn by imitating sounds, behaviors, actions according to the context in which they live because these neurons are activated when people see or do an action (p.21).

On the other hand, Sprenger proposes that teachers must set goals by being clear with his/her purpose of the reading, this action will reduce anxiety and students will feel safe and comfortable with the proposed activities. "Predictability is important for creating a safety and security for the brain" (2013, p. 149)

It is relevant to highlight that this proposal will consider the following brain friendly strategies to enhance reading comprehension process. Visualizing refers to the ability to create pictures in people's heads based on text they read or words they hear. This ability allows students to be active readers, because it makes a bridge between the text and the mind. Visualization

makes explicit the text, since readers are able to search for connections between what is known and new information, to draw inferences during and after reading, to distinguish important from less important ideas in texts and to synthesize information within and across texts. Good readers spontaneously and purposefully make mental representations in their minds during and after they read. For each individual reader, the mental picture will be different and unique based on his background knowledge and text clues. Harvey& Goudvis (2007) state, "when we visualize, we are in fact inferring, but with mental images rather than words". (p. 131) Therefore, good readers are able to use the mental pictures to help them infer meaning and recall events from the text they are reading much easier than readers who did not make those pictures in their minds. Visualizing personalizes reading and keeps readers engaged with the text.

When students read a text, they make pictures in their mind that belong to them. In this sense, reading becomes a personal and joyful experience. Visualizing helps students learn the link between the words on a page and the pictures in their head. According to Harvey& Goudvis (2007), "students who visualize as they read have a richer reading experience and can better remember what they have read for longer periods of time." (p. 132). By vividly visualizing the events depicted by the author's words, creative readers allow themselves to become part of the story; they see the colors, hear the sounds, feel the textures, taste the flavors, and smell the odors the writer describes. They will find that they are living the story as they read.

Predicting is another brain friendly strategy that promotes students' engagement with reading. This strategy is the ability to tell in advance, what could happen in the text. It produces in the students a sense of curiosity since they want to know if their predictions are right or not. For the brain, predicting is very exciting because the brain is curious and enjoys being right. In this situation, the brain frees dopamine and there is a sensation of pleasure that it wants to feel again (Sprenger, 2013 p.151)

On the other hand, it is relevant to recognize the importance of predicting since this strategy may activate reader's background knowledge. When readers predict, they are "actively engaged in meaning-making process" (Moreillon, 2007 p. 76) in other words, readers bring their memories, their experiences, the schema they have to understand the world, in order to comprehend the text they are reading. All this background knowledge provides the reader the opportunity to relate the new information with the previous one with the aim of understanding better the meaning of the text.

Predictions could be made before, during reading or after, the objective is to engage the reader into a more active process where there is a dialogue between the author's thoughts and the meaning built up by the reader. Each element of the text could be used to make predictions, in this sense any part of the story, a title, a picture or even a word could be a clue to anticipate and formulate a hypothesis which will be tested during the reading process, and this activity promotes reader's motivation. "When readers read to test their hypotheses, their motivation, level of engagement and enjoyment of texts can increases significantly" (Moreillon, 2007 p. 83). Regarding reading, questioning is an important social skill that allows students to wonder about content and concepts before, during and after it by constructing and enhancing meaning, finding answers, solving problems , finding specific information, acquiring a body of information, discovering new information , propelling research efforts and clarifying confusion.

As stated by Moreillon (2007) "Questioning, a lifelong skill, can and should be taught across the curriculum. Questioning is an essential component of reading comprehension, of conducting research, and of critical thinking. In short, questioning is a key to learning." (p. 64) It is necessary to consider that every children use this ability to relate and learn from the world, however through his/her school life, questioning is enclosed in terms of answering questions in order just to give specific information.

Whitebread explains clearly this phenomenon: "It is somewhat ironic that while parents will often complain about the number of questions that children expect them to answer, the opposite is true in schools. In schools, it is the teachers who ask the questions and children who are expected to provide the answers" (2000, p. 70). Even though it is undeniable, the importance of questioning in the reading process, this strategy has been undervalued and teachers have not taken advantage of its benefits. In this sense, it is necessary to reflect on what teachers think about reading, the purposes of reading instruction, and the development of the students' learning, because as they conceive it, in the same way it will be shown the nature of the questions they ask.

According to Wells (1986) Questioning is a very used strategy at school " but occurs most often in the initiate– respond– evaluate (IRE) discourse form, in which the teacher initiates a question, one student responds, and the teacher evaluates the answer" (p. 78). Nevertheless, when the teachers' objective is using questioning to go deeper on reading comprehension is significantly different in purpose and in application. In this way, the students are not asked to answer specific questions, but ask and answer themselves questions that allow them to scaffold their knowledge and to enhance high thinking skills. Therefore, the role of the teacher is to create engaged environments related with the reading questioning before, during and after reading keeping in mind that students must be encouraged to be active participators that ask and answer questions in order to look of relations, meanings and connections.

Considering the brain seeks out patterns which are the way of making connections between the text and reader's prior knowledge, Sprenger (2013) declares that making connections is an effective strategy to activate prior knowledge and relate the text to previous texts, experiences and information students have been exposed, in terms of the author: "text-to-text, text-to-self and text-to-world connections" (p.157). This strategy could be fostered by posing

questions related to these levels to involve students in an active reading process where they can bring their background knowledge to the reading moment and establish the possible connections that will help to comprehend accurately the text.

Another way to encourage students to make connections is to make relationships between the new information given by the text and the senses. When a person mentally "sees" and image or "hears" a sound, he/she is reconstructing the neural pathways that were formed during the first time he/she experienced the stimulus. This is an excellent opportunity to enhance students' comprehension since "hear and vision are powerful components of brain functioning to increase understanding and retention of information" (Wolf, 2010 p. 182). Therefore, readers activate their schemas to comprehend the text. In words of McGee & Richgels (1996 p. 5) a schema is a "mental structure in which we store all the information we know about people, objects, or activities". Schemas have been built based on readers' experiences and are very useful to integrate and organize new information. To take advantage of this strategy allows considering reading as a complex and nonlinear process that involves the author´s message as well as the reader's interpretation in an equally valid level.

In conclusion, the theoretical constructs stated previously, give the current researchers a connection between the professional development through the teachers' collaborative work exploring the findings of neuroscience and the possible applications into the educational environment. It is not only an opportunity but also a challenge to pose collaborative proposals based on the brain's principles in order to foster the teaching practice. In words of Wolf (2010 p.220) "Brain matters because our children matter".

CHAPTER II

Proposal

In the interest of answering our scientific question: How could a teachers' proposal be to enhance reading teaching practices at Manuelita Saenz school? and considering the characteristics of the context in which this proposal was carried out, this chapter presents the methodological design implemented during the research process which includes the research design, the type of study, the context and the participants. In the same way, the paper presents the data collection, the research process, the data analysis and the conclusions.

2.1. Research design

This study is a Collaborative Action Research proposal since its main objective is to develop a collaborative teachers' proposal to enhance reading teaching practices at Manuelita Saenz School. To achieve this objective, it is quite necessary to encourage the participation of each English teacher as an active promoter of new relationships that help each other to grow up together and improve their pedagogical practices. The more we share, the better our students learn.

According to Butt, Townsend & Raymond, "Collaborative action research is defined as a variety of stakeholders cooperating together to explore questions of mutual interest through cycles of action, experience and reflection, in order to develop insights into particular phenomena, create frameworks for understanding, and suggest actions which improve practice" (1992). That is why this research design is very convenient for this specific proposal because it intends to encourage the four English teachers of the school to work together in order to look for possible common criteria to foster their reading teaching practice.

The following reasons stated by Bryant (1995) show how Collaborative Action Research may improve teaching practices.

1. Collaborative Action Research can help narrow the gap between theory and practice.

2. Practices developed in Collaborative Action Research tend to be pragmatic in nature, being both workable in real-world contexts and meeting teachers' more immediate needs.

3. Collaborative Action Research is "user friendly" in that the language involved makes sense to teachers.

4. Traditional research into the theory of human action dwells mostly on the past and present. Because of the cyclic nature of Collaborative Action Research, it not only examines the past and present, but also provides constructive alternatives for the future.

5. Collaborative Action Research records and reports on the dynamic process of creating alternative practices and understandings, which inform teachers more about the possibilities, procedures, and practices for implementation.

6. The process of Collaborative Action Research is both personal and contextualized, taking into account the many differences that exist in classrooms or schools.

As it was mentioned before, Collaborative Action Research promotes the professional development because it enhances a real coherence between what a teacher knows and what a teacher does in the classroom, reflecting together, not in isolation. It creates a confident atmosphere where each member of the group can foster teamwork, value each other, create common purposes and find collaboratively new ways of teaching according to the context.

Furthermore, Collaborative Action Research may influence the institutional environment in long term since all members are involved and participate actively in the changing process.

This research has a qualitative approach it plans to describe the process of the collaborative work followed by the participants in order to set common criteria to enhance reading teaching practices. As Mills (2007) claims, a qualitative research "uses narrative, descriptive approaches to data collection to understand the way things are and what it means from the perspectives of the research participants" (p.4)

The scheme that this research has followed is The Problem Resolving Action Research (PRAR) Model proposed by Piggot (2001):

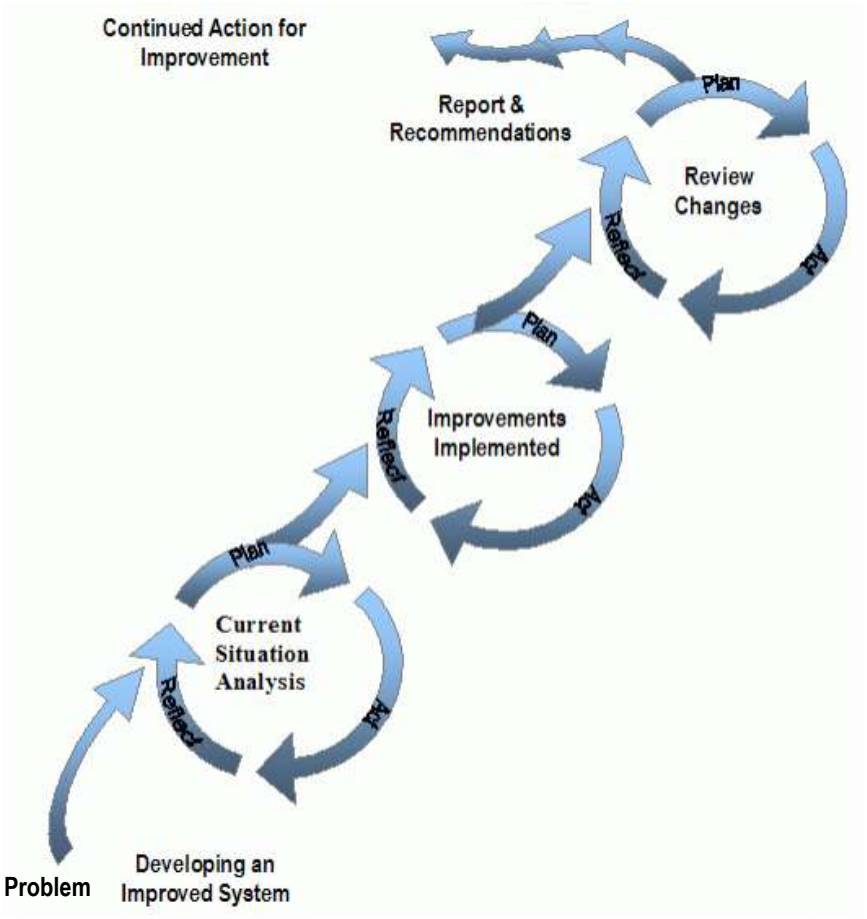

Figure 3. Collaborative Action Research Process. Piggot (2001)

This model consists of three cycles, each one with three steps, plan, act and reflect. Each cycle is the basis to move up to the other. The cycle 1: 'current situation analysis' is addressed to analyze the problematic situation. The cycle 2 is called 'improvements implemented' and its main objective is to carry out the planned actions to deal with current situation, and the final cycle 'review changes' that figures out how accurate the implemented actions were. For this specific proposal the two first cycles were developed, because the third cycle demands a long-term research.

This model encloses some characteristics that clearly adjust to the purpose of this research that is to develop a collaborative teachers' proposal to enhance reading teaching practices at Manuelita Saenz School. As Piggot (2001) states, this model is transformative, it narrows the theory-practice gap, it has a data-based reflection, it promotes problem-solving and dialogical interchange and it is collaborative. In this sense, the cyclical model allows us to generate the conditions to plan, to act and reflect collaboratively in order to enhance our pedagogical practices.

2.2. Context and participants

To understand where this research takes place, it is necessary to talk about the school in terms of location, English class organization and teachers' characteristics. First, Manuelita Saenz is a public school located in the south of Bogota. There are 1900 students approximately from preschool to eleventh grade. Students belong to 1, 2 and 3 socioeconomic strata.

Pupils from secondary level take English classes of three hours a week. There is a syllabus built by a group of teachers in 2006, which has been assessed and modified continuously. The syllabus is supported in a curricular platform that leads the English teaching process. This platform has the concept of language as communication, the discourse theory as a

theory of learning a language, the humanism as a philosophy of education, the communicative approach, the cooperative learning and project work as methodological criteria.

English classes are organized by levels: Beginners, Pushers, Braves, Champions, Super-champions and Winners according to students' proficiency. Each term, students develop a project designed by each one of the teachers what means that all teachers use the same material to work, but they do not participate together in the designing of the projects.

The participants of this research are the four English teachers of school, three women and a man. Amalia Vargas Pérez is a teacher with 25 years of teaching experience. Nelson Mellizo Guaquetá is an English teacher with 6 years of experience at school and a year in the university. He has a Master's degree in Education with emphasis on didactics of English from Externado University. Patricia Pérez Díaz has been working as a teacher for 17 years and Martha Patricia Correa Thian for 15 years. The last two teachers are Master candidates at Libre University and they are who are leading the research process.

It is important to add that the English teachers have been working as a team for some years due to the conditions they have in the institution: the four English teachers have the same schedule. All Educators teach all levels, so they interact with all students and implemented the projects. Teachers have a Department meeting once a week, in that meeting they deal with institutional issues. Sometimes they share concerns related to the results of students especially on institutional tests, however these concerns are shared in informal talks because there are no spaces to discuss teaching experiences.

2.3. Data Collection

In this research there were used a theoretical method and some empirical methods to gather the information to be analyzed.

To identify the theoretical support related to collaborative work, reading teaching practices and Brain Mind Education, as well as the literature review it was necessary to use the theoretical method: logical historical and analysis and synthesis.

During the research process we developed four teachers meetings and three lesson plans to students based on Brain/Mind Education elements: Brain based conditions, Brain/Mind principles, processes, and achievements: that are connected to each other in a complementary manner. This design stemmed from the Brain/Mind Education principles and conditions outlined by many researchers (Caine, Caine, McClintic & Klimek, 2009; Jensen, 2008).

Related to the empirical methods, we used three instruments for data collection in different moments: three surveys, four observations and two interviews to the English teachers. Cohen, Manion & Morrison (2000) state that "surveys gather data at a particular point in time with the intention of describing the nature of existing conditions, or identifying standards against which existing conditions can be compared, or determining the relationships that exist between specific events. Thus, surveys may vary in their levels of complexity from those which provide simple frequency counts to those which present relational analysis." (2005 p. 169) Considering the importance of surveys to collect information, three surveys were addressed at different points of the process in order to know participants' thoughts related to the process itself.

The observation is a very useful strategy to gather qualitative information. It provides to the researchers real data about how the participants interact, how they communicate as well as guide relations between participants. The observation can help investigators to figure out how the data are organized. Furthermore the researchers can comprehend some situations that the participants cannot or do not want to share because of their cultures, beliefs and values. In words of Patton (1990) "Observational data are attractive as they afford the researcher the opportunity to gather 'live' data from 'live' situations. The researcher is given the opportunity to look at what

is taking place in situ rather than at second hand". It is important to mention that each one of the meeting was recorded and later analyzed using an observation chart that was previously revised and validated. The observation is a relevant instrument to carry out this research. It provides us enormous information in terms of how collaboration is being built and how each teacher expresses, shares his/her ideas and experiences. It is an accurate instrument to take out important data about successful and unsuccessful pedagogical practices. It makes evident the possible changes that appear during the process. Finally, it gives us under covered information that teachers have hidden because of his/her own fears or lack of institutional collaborative work.

Another data collection instrument we used was the interview. Kvale (2006) defines this instrument as "an interchange of views between two or more people on a topic of mutual interest, sees the centrality of human interaction for knowledge production, and emphasizes the social situatedness of research data". As researchers, we interviewed the teachers two times at the beginning and at the end of the process, because of the importance of knowing the viewpoint, the perception and even the feelings of the participants. (p.11)

Once the data have been gathered, it is necessary to analyze them taking into account the scientific question, the collected data and the theoretical framework as well as any other themes that emerge as the process unfolds. This stage is called triangulation, which involves the use of different sources of information to validate the research. The benefits of triangulation include "increasing confidence in research data, creating innovative ways of understanding a phenomenon, revealing unique findings, challenging or integrating theories, and providing a clearer understanding of the problem". (Thurmond, 2001, p. 254)

2.4. Research Process

In this section, we present the process that was carried out in this research, with the aim of answering the scientific question: How could a teachers' proposal be to enhance reading teaching practices at Manuelita Saenz School? We decided to follow the Research Design proposed by Piggot (2001). Even though it consists of three cycles, for this specific research we took the first two, because the expected results in the last cycle demand a long-term process. Each cycle has three steps: Reflect, plan and act, it is the basis for the next cycle showing a spiral process.

As Piggot (2001) suggests, the starting point of the research process is the problem. In our case it was found that teachers have their own reading teaching practices, so that it is used individual criteria to address reading. They have not reflected together on these practices and in their impact on institutional results. That is why the stated problem: *an unarticulated work among teachers that is evidenced in the lack of organized, clear and purposeful reading teaching practices*, is the basis of our research process. As it was previously explained, the problem was validated using a preliminary cycle as it is shown in the following figure:

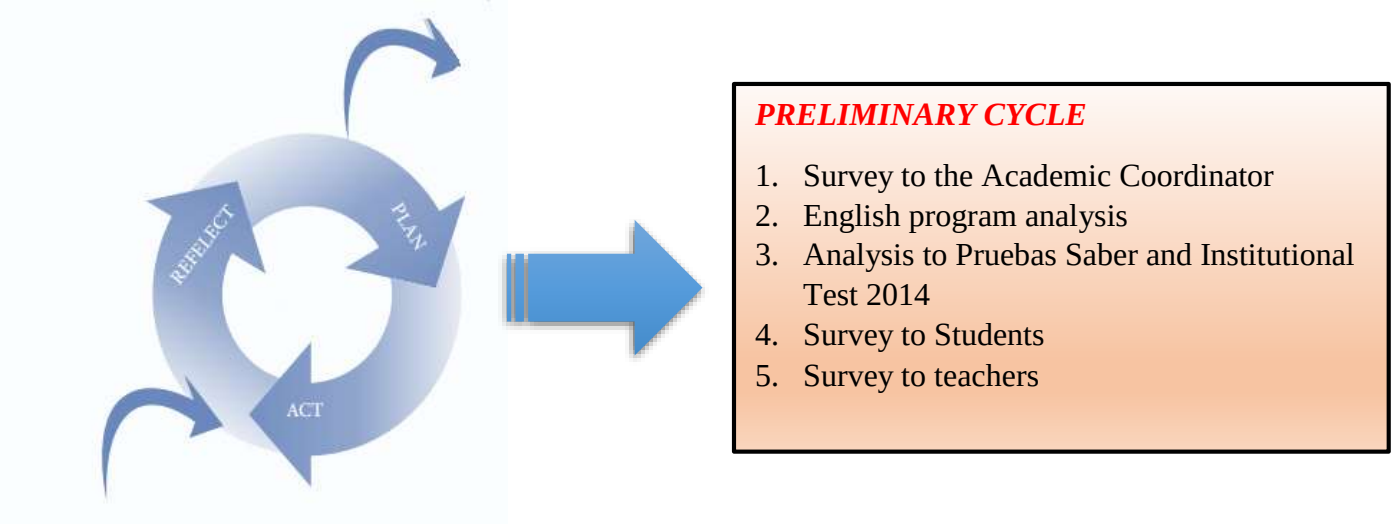

Figure 4. Preliminary Cycle process and instruments.

The research process was divided in two cycles as follows

2.4.1. Cycle 1: Current situation analysis: Analyzing collaboratively.

The objectives of this cycle were:

1. To verify the ability to focus on
2. To go deeper on our reading teaching practices
3. To describe our current collaborative work.

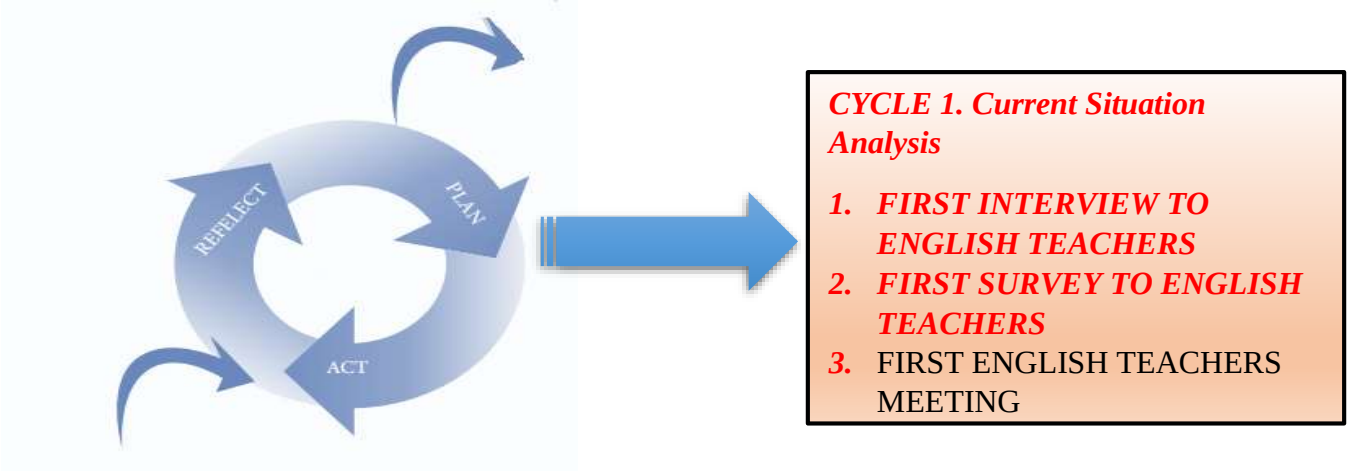

Figure 4. Cycle 1 process and instruments.

The previous figure shows the process of the cycle 1, which is described as follows:

2.4.1.1. Step 1. Reflect.

Taking into consideration that a collaborative action research process implies an active participation of the stakeholders, we encouraged our colleagues from the beginning to reflect and contribute with their perceptions in order to analyze the current situation in a more descriptive fashion, and not only with the point of view of the leader researchers.

2.4.1.2. Step 2. Plan.

To generate the conditions to involve participants in the process, we designed an interview to verify the ability to focus on, and a survey to go deeper on reading teaching practices

and our collaborative work. Its main purposes were to describe and analyze clearly the reading strategies used by each teacher, and if we share or not our pedagogical experiences.

Starting from the results of the survey and the interview, the first meeting was planned taking into consideration the Brain/Mind Education model (See annex 8). Its objective was to describe to what extent teachers analyze collaboratively the current situation of English subject at the school, regarding reading teaching practices and collaborative work.

2.4.1.3. Step 3. Act.

Once the interview was addressed, the four English teachers agreed that reading was the first ability to be fostered and it would be the starting point to enhance the other abilities gradually (See annex 6). Regarding the survey, teachers explained carefully the reading teaching process they use in their classes as well as their experience talking about collaborative work at school (See annex 7).

When we analyzed the interview and the survey, we developed our first meeting. This meeting was on September 29th 2015. Bearing in mind the Brain/Mind Education Model, we divided the meeting in three main moments: In the 'Relaxed Alertness' moment, we considered these brain principles Caine&Caine (1994): Brain/Mind is social and the search for meaning is innate The activity was a 'woolen ball discussion' whose objectives were to create the psychological relaxation to start the process and to know teachers' perception about English teachers work. Using a woolen ball, teachers took turns to answer some questions related to reading teaching practices and collaborative work. 'The orchestrated Immersion' moment had to do with these brain principles: The Brain/Mind processes, parts and wholes simultaneously and learning is developmental. Two activities were developed, first a Power Point presentation about the findings stemmed from the survey and the interview and a discussion about them, then a

check list activity where teachers set up their priorities related to collaborative work and reading teaching practices. In the final moment: 'Active Processing', the Brain/Mind principles considered were: each brain is uniquely organized and the Brain/Mind is social. The activity was called "our commitments" and its objectives were to express the will to participate, work and grow professionally together and to establish collaboratively the way to enhance reading teaching practices. All this process was recorded and analyzed through an observation chart (See annex 9)

2.4.2. Cycle 2: Improvements implemented moving forward collaboratively.

The objectives of this cycle were:

1. To build up a collaborative proposal to enhance reading teaching practices.
2. To foster teachers collaborative work.

The figure 5 shows the process developed in this cycle, which is described as follows:

2.4.2.1. Step 1. Reflect.

With the results of the first cycle in mind, we reflected on the following aspects: first, reading is the ability to focus on, second teachers have specific strategies to guide reading comprehension process, however we do not have common criteria that allow us to enhance our reading teaching practices, and in this way to teach this ability effectively. Afterwards, the reflection was oriented to recognize that the school does not have the necessary conditions to allow teachers to share their experiences, pedagogical practices and expectations. Finally, teachers expressed the importance of working together and their willingness to do it.

2.4.2.2. Step 2. Plan.

To generate the necessary conditions to develop a collaborative proposal to enhance our reading teaching practices, we planned to encourage teachers to participate actively in the three

inner cycles that compose the cycle 2, as it is shown in the figure 5: Every teachers' meetings were recorded and analyzed through an observation chart.

Owing to teachers participate collaboratively in each inner cycle, each one of them, must be the basis of the next one, keeping in mind the contributions made by teachers during the process. It is relevant to clarify that each inner cycle has the same steps of the main ones (reflect, plan, act).

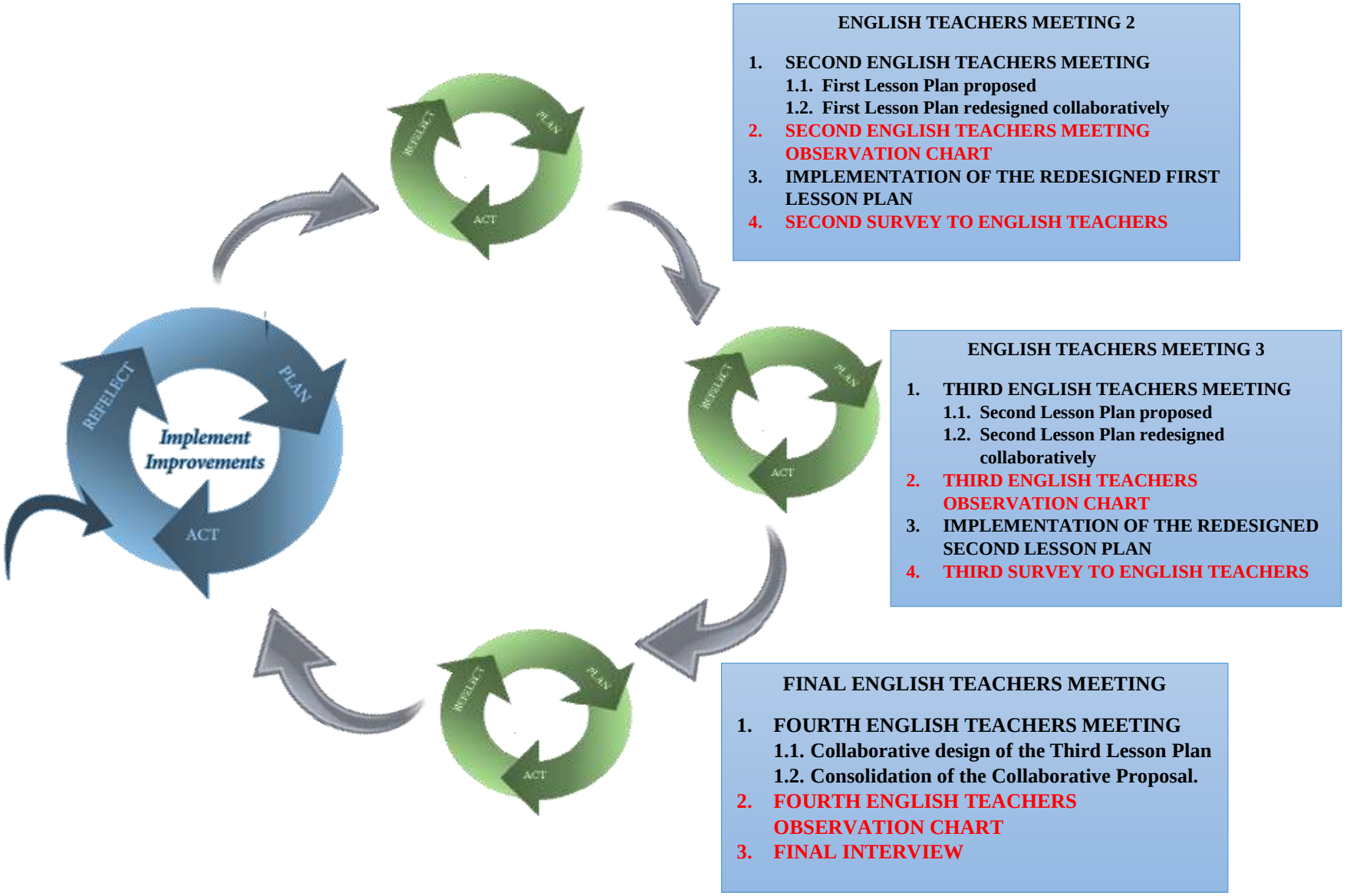

Figure 5. Cycle 'Improvement Implemented'. Process and Instruments.

2.4.1.3. Step 3. Act.

This step introduces each one of the inner cycles proposed before.

Inner cycle 1.

The objectives of this inner cycle were:

1. To clarify teachers some aspects about Brain /Mind Education, its principles, and some implications in reading
2. To encourage teachers to analyze a given workshop in order to improve it taking into account Brain/Mind Principles.

Step 1. Reflect.

What we are mainly concerned with here, is to inspire teachers to work collaboratively to develop a proposal to enhance our reading teaching practices, therefore it was necessary to generate an atmosphere in which teachers can share, learn, live, discuss and grow professionally together bearing in mind reading teaching practices.

Step 2. Plan.

We planned to do a second meeting in which we as leader researchers, came up with a discussion related to Brain/Mind Education. (See Annex 10) After that we proposed a reading lesson plan to be analyzed and enriched collaboratively taking into account what teachers suggested according to their own experiences, knowledge and expectations. These data were collected using an observation chart. Once the workshop was redesigned each teacher is asked to implement it in his/her class. Finally, using a survey we expected to gather information about what teachers thought about Brain/Mind Education, its relation with reading and collaborative work.

Step 3. Act.

Following the proposed plan, the meeting was developed on October 19th 2015. The 'Relaxed Alertness' moment had to do with emotions are critical to patterning and the search for meaning is innate as Brain/Mind principles. The activity was to analyze and discuss a video about Jacob Barnett. The objectives were to create the psychological relaxation to start the process and to know teachers' perceptions about what the learning process implies. The second moment: 'Orchestrated Immersion', was guided by these three Brain/Mind principles: the Brain/Mind processes parts and wholes simultaneously, Learning is both conscious and unconscious, and complex learning is enhanced by challenge and inhibited by threat. Here each teacher was challenged to make three different puzzles: one about Brain/Mind principles (Caine & Caine, 1994), the other about what meaningful learning means (Wolf, 2010) and the last one about the three Brain/Mind Education conditions (Jensen, 1996). Based on these puzzles, some concepts were clarified and there was a discussion related to Brain/Mind Education and reading, as well as our reading teaching practices. The 'Active Processing' moment was dealing with: each brain is uniquely organized, emotions are critical to patterning, and learning involves both focused attention and peripheral perception as the Brain/mind principles. We, as leader researchers, proposed a lesson plan (See annex 11) to be analyzed bearing in mind the discussed topics and the teachers' experiences and knowledge. The lesson plan was redesigned collaboratively, considering teache rs suggestions in order to be implemented in their classes. These changes are specified in the annex 12. All this process was recorded and analyzed through an observation chart (See annex 13). It is essential to mention that for this specific research, we are not interested in students' impressions or their results, but in teachers' viewpoint after the implementation, for that reason a survey (See annex 14) was important to find out teachers' perceptions about

Brain/Mind Education, reading, collaborative work and to take out some elements that may enrich the criteria to face reading skill at school.

Inner cycle 2.

The objective of this inner cycle was:

1. To learn collaboratively about Brain Friendly strategies and Reading

Step 1. Reflect.

Analyzing the results given by the observation chart and the survey, it was necessary to go deeper on methodological aspects therefore, the third meeting was designed on Brain friendly strategies useful to foster reading.

Step 2. Plan.

As we mentioned before, the third meeting (See annex 15) was designed emphasizing on these Brain friendly strategies: questioning, activating prior knowledge, visualizing and making connections. To put in practice those strategies, we as leader researchers proposed another lesson plan to be reviewed, analyzed and changed by the teachers according to what they have learnt and their pedagogical practice.

As one of our main purposes is to empower teachers in the process, teachers are encouraged to propose a text and some activities to be analyzed in the final meeting, in order to build up a collaborative lesson plan, based on the four teachers' contributions and the learning acquired during this process.

Once more teachers are required to implement the lesson plan in their classes, therefore a survey was conducted to gather information in terms of the implementation experience, the use of Brain friendly strategies, collaborative work and the possible criteria to enhance reading teaching practices.

Step 3. Act.

As it was planned, the third meeting was on October 26th 2015. In the 'Relaxed Alertness' moment, the following Brain/Mind principles were considered: The search for meaning occurs through patterning, emotions are critical to patterning and The Brain/Mind is social. In this moment, teachers fulfilled a mind map about Brain friendly strategies to know teachers' perceptions about the topic. Secondly in the 'Orchestrated Immersion' moment, teachers watched and video meanwhile they filled up a graphic organizer; subsequently they discussed their findings and related them with their pedagogical practices. Here, we focused on these principles: Learning is developmental, the Brain/Mind is social and emotions are critical to patterning. The last moment, 'Active Processing', we as leader researchers created the conditions in which the participants felt more confident to participate and we animated them to take a more active role in the revision and analysis of the second lesson (See annex 16) The Brain/Mind principles that informed this moment were: Complex learning is enhanced by challenge and inhibited by threat, learning involves both focused attention and peripheral perception and learning is both conscious and unconscious.

As a final commitment, we invited teachers to propose a text and some activities to be discussed and analyzed in the final meeting in the light of Brain/Mind principles, our own knowledge and experiences and the criteria we have been establishing. An observation chart was used to obtain information. (See annex 17)

Teachers implemented the revised lesson plan (See annex 18) and we conducted the third survey (See annex 19) to collect information in terms of the implementation experience, the use of Brain friendly strategies, collaborative work and the possible criteria to enhance reading teaching practices.

Inner Cycle 3.

The objectives of this inner cycle were:

1. To design collaboratively a proposal to be implemented with the students taking into account Brain Mind Education and Brain friendly strategies to enhance reading teaching practices.
2. To establish the common criteria to enhance our reading teaching practices.

Step 1. Reflect.

We reflected on how collaborative work have been growing up during the process and it is an alternative to enhance our teaching practices, however it was necessary to make it clear and systematic. On the other hand, the studied concepts related to Brain/Mind Education can enrich our pedagogical practice.

Step 2. Plan.

Having the theoretical concepts, the experience given by the implementations, the knowledge of our context and the reflection related to the criteria to enhance our reading teaching practices, a final meeting was planned (See annex 20) in which each teacher proposed a text and some activities to be discussed and analyzed in order to build up a collaborative workshop. A final interview was addressed to gathered information of the whole process.

Step 3. Act.

The final meeting was developed on November 10th 2015, taking into account these Brain/Mind principles: The Brain/Mind is social, there are at least two approaches to memory, and the Brain/Mind processes parts and wholes simultaneously, the 'Relaxed Alertness' moment was designed. Teachers played a board game for retrieving information about the previous meetings. The 'Orchestrated Immersion' moment was focused on the following Brain/Mind principles: The Brain/Mind is social, Learning is developmental, and each brain is uniquely

organized. Here teachers participated in a discussion to share meaningful strategies related to reading. In the 'Active Processing' moment, we considered these Brain /Mind principles to build up our collaborative workshop: The brain/mind is social, the search for meaning is innate, Emotions are critical to patterning, and 'Complex learning' is enhanced by challenge and inhibited by threat. Each teacher explained his/her proposal. We, as a team, selected the reading and the level to be implemented. Then, we designed collaboratively the lesson plan (See annex 21) considering the conditions of Brain/Mind Education, Brain/Mind principles, Brain friendly strategies, the learning teaching process and the expected outcomes. As a closing activity, the common criteria to enhance our teaching were consolidated collaboratively. An observation chart was used to gather data from these meeting. (See annex 22)

To collect the final information the four teachers were interviewed to find out their concluding point of view regarding collaborative work, Brain/Mind Education and reading teaching practices. (See annex 23)

2.5. Data Analysis

Regarding that, this is a Collaborative Action Research process and the gathered information was qualitative. We took over the data analysis process proposed by Burns (2001) as it follows:

Stage1. Assembling the data: This stage has to do with the collection of all the data we gathered during the research process. We took as a starting point our research question: what could a teachers' proposal be to enhance reading teaching practices at Manuelita Saenz school? It was the basis to build up the broad picture of our data considering some big patterns that emerged during this stage, as well as some reflections we have made about them.

Stage 2. Coding Data: This moment allows researchers to refine the information using codes and categories. To analyze the information gathered, we designed an observation chart analysis for each meeting we developed. (See annexes 9, 13, 17 and 22). A chart analysis for each survey (See annexes 7, 14 and 19) and a chart to analyze the addressed interviews. (See annexes 6 and 23)

Based on Stage1, we established the categories that stemmed from the data as it is explained:

In the Cycle 1. Current Situation Analysis: 'Analyzing Collaboratively' our purpose was to analyze the current teaching practices, how teachers face collaborative work reflected on their willingness to participate, the discussion and their contributions in the research process. The categories that emerged from this cycle were current reading practices and cooperation.

The Cycle 2. Improvements Implemented: 'Moving Forward Collaboratively' was focused on building up the collaborative process, as well as to create a collaborative proposal to enhance the reading teaching practices. With the purpose to analyze this cycle other categories emerged: Working together, reading teaching practices and criteria to enhance reading.

Stage 3: Comparing data. In this stage, the researchers must compare across the collected information given by the instruments in order to identify the possible relationships, connections or contradictions.

Cycle 1. Current situation analysis: 'Analyzing collaboratively'

As we stated before the purposes of this cycle were to verify the ability to focus on, to go deeper on our reading teaching practices and to describe our current collaborative work. Therefore, it was necessary to address three instruments to gather information an interview, a survey and an observation chart of the first teachers' meeting. Subsequently we organized,

compared and analyzed the data gathered that stemmed the following categories. First, current reading teaching practices and second, cooperation. (See annex 24)

Cycle 2: Improvements implemented: 'Moving forward collaboratively.

We cannot lose sight of the objectives of this cycle in order to analyze the data, first to build up a collaborative proposal to enhance reading teaching practices and to foster teachers' collaborative work. Considering the objectives and the gathered data given by three observation charts, two surveys and a final interview, we organized the information in three categories: Reading teaching practices, Working together and Criteria to enhance reading: The first one allows us to go deeper on our own reading teaching practices, bearing in mind our concerns related the context and the contributions of BME and collaborative work.

In working together category, it is analyzed teachers collaborative work in terms of collaborative skills, positive interdependence, heterogeneity and accountability. These characteristics were proposed by Diaz (2004) and they were disclosed in the collected data.

The last category regards with the Criteria to enhance reading. The teachers' experiences and knowledge generate the basis of these criteria enriched by the Brain Mind Education contributions. It was necessary to design a chart for each category and its respective subcategories organizing the data gathered in this cycle as it is explained the following chart 2. The complete data are shown in the annex 25.

Chart 1. *Categories and subcategories in cycle 2*

CATEGORIES	SUBCATEGORIES
READING TEACHING PRACTICES	Reading Teaching Concerns BME Contributions
WORKING TOGETHER	Building up together Cooperative skills Positive interdependence Hetereogeneity Accountability
CRITERIA TO ENHANCE READING	Methodology BME Contributions

Stage 4. Building interpretations. This is the point where researchers go beyond and make sense of the data. In this stage, we analyze the data collected from the two cycles and show the findings disclosed during the research process.

Cycle 1. Current situation analysis: 'Analyzing Collaboratively'.

As we explained before two categories were established to analyze the gathered information, bearing in mind the objectives of this cycle: to verify the ability to focus on, to go deeper on our reading teaching practices and to describe our current collaborative work.

Category 1. Current Reading Teaching Practices.

According to the findings teachers agreed that fostering reading could be a starting point to advance in the student's 'learning process. It is related with the stated problem, due to the unexpected results in 'Pruebas Saber', as well as, in the Institutional tests. It is important to highlight that teachers feel pressure toward these results, because its professional quality is put on doubt.

When current reading teaching practices were analyzed, we found that teachers have an organized process where they use different activities (pre reading, while reading and post reading activities) and resources to teach this ability .This finding evidences that teachers consider reading as a complex skill as Czico et al (2000) mention "Reading is a complex process of

problem solving in which the reader works to make sense of a text not just from the words and sentences on the page but also from the ideas, memories, and knowledge evoked by those words and sentences."(p.38)

In this point, a contradiction appears because in spite of having clear reading teaching practices, the results are not the expected, therefore a sense of frustration comes up.
In addition, we found each teacher has his/her own criteria to teach this ability based on his/her knowledge and experiences. This particular way of teaching differs one from another, even though there are some similarities. This situation shows that teachers work in isolation, we are not saying that a particular way of teaching is bad, and we value that each person has his/her own characteristics, however, as Carroll (2009) affirms: "Quality teaching is not an individual accomplishment, it is the result of collaborative culture that empowers teachers to team up to improve students learning beyond what any of them can achieve alone". (p.13) In fact, teachers believe that it is essential to benefit from the institutional conditions to foster the collaborative work.

"Teachers consider that it is important to take advantage of the conditions given by the English project, to strengthen it through a more effective collaborative work."

First meeting observation chart.

Category 2. Cooperation.

According to Diaz (2004), cooperation enhances that "team members actively seek to contribute to the work of others in the team by offering support, challenges, or assessment" (p.26). In this sense, this characteristic emerged as category when analyzing the data. Teachers consider working together using common criteria could be an interesting opportunity to overcome the difficulties and find collective alternatives based on the comprehension of the context, the experiences, the knowledge and the will to learn new things together.

"Teachers believe that to reflect together on our own teaching practices may have a higher impact on the whole institution." First meeting observation chart.

It is important to mention that in this cycle the leader researchers proposed BME as a possibility to enhance the reading teaching practices. Related to this, teachers think that it would be interesting to learn about BME together to enrich the pedagogical practice since it is a topic that had not been studied by them before.

It was touching how teachers expressed their frustrations and fears toward institutional realities, because this catharsis allows those feelings come up and can be broken, instead of being fossilized in our pedagogical practices. Hargreaves (1994) defends this idea saying that moral support can help educators to lead to and to deal with the teaching problems that learners sometimes present.

Cycle 2. Improvements Implemented: 'Moving Forward Collaboratively'.

Three main categories emerged in this cycle, and some subcategories in order to analyze in detail the collected data.

Category 1. Reading teaching practices.

Subcategory 1. Reading teaching concerns.

It is evidenced some positive aspects that can create the conditions to improve our pedagogical practices: On the one hand, there is an English project recognized and supported by the institution, although it must be fostered to increase its quality in terms of results. Besides, there is an English teamwork of teachers that are worried and committed to improve students' learning process, who have been working in an incipient collaborative work reduced to share the materials and projects. Finally, teachers view as a great opportunity to grow together the fact of reflecting carefully on the current reading practices, not only emphasizing in their strengths, but

in their weaknesses in an atmosphere of positive criticism in benefit of the students and the growth of the institution.

Another concern that teachers claim has to do with the fact that we emphasize on grammar rather than a functional approach, we do not create the conditions in which students can enjoy reading, even though we know interesting strategies we do not put them in practice, hence there is an inconsistency between what we know and what we do in class. For this reason, it is important a reflection in order to look for new ways to overcome the difficulties.

After the implementation of the workshops, teachers declare that students do not have enough vocabulary to express their opinions, so that they feel frustrated decreasing their motivation. In this sense, students have problems with the literal level of reading since they cannot decode the text. Paradoxically, it is expected that students achieve higher levels in Pruebas Saber and even in tests made by English teachers. In this way, another contradiction arises between what we think we teach and what students really have learnt.

Something important to add is that in the reflections we as teachers recognize that the problem is not on the students, but our responsibility is to enhance our teaching practices, creating strategies to help our students to overcome their difficulties and take advantage of their abilities to develop a better learning process.

Subcategory 2. Brain Mind Education contributions.

All the teachers meetings and the implementations of the workshops allowed the group of teachers to reflect and learn new elements related to new perspectives of teaching. In this sense, the findings show how teachers perceive the contributions of BME to our teaching practices. First of all and taking into consideration that students are the center of the learning process, teachers affirm that if we know how the brain learns, we can nurture our teaching practice using more effective strategies to help students to learn better. As Jensen explains “by using what we

know about the brain, we can make better decisions and reach more learners, more often, with fewer misses" (2008, p. 4). On the other hand the participants of the process realize how important is to include the emotions and feelings in the reading process, because students show more interest participating actively.

Subcategory 3. Building up together.

Nowadays institutional dynamics have enclosed teachers to develop their pedagogical practices in a square room, where it is just invited to the students and teachers themselves; as a result, we have gotten used to work in isolation. "Paradoxically, although teachers by definition spend their lives in the company of others, it is in many ways a lonely profession" (Wallace, p 2000, 207). Nevertheless, these new collaborative relations between teachers open our mind, perspectives and even could improve our results. However, this process can be difficult at the beginning; it is a challenge that we have to face being consistent to have a real impact in the institution.

Data disclose that teachers find the process as an opportunity to foster their teaching practices. They mention that it was not easy the redesign of the workshops but at the end it was possible to build up a collaborative workshop to be implemented with students.

"The designing of the workshop was not so easy because of teachers' opinions however we could build up a proposal collaboratively." Fourth meeting observation chart. In addition, teachers consider that if we plan, implement and evaluate together, we enrich our pedagogical practices and grow professionally.

It is clear how this kind of academic meeting enrich the pedagogical environment giving teachers the opportunity to reflect continuously, as in this specific case, we analyze together a new pedagogical perspective, then, we are encouraged to put it in practice, reflecting again

towards the benefits in our specific context and finally assessing the whole experience with our colleagues.

Category 2. Working together.

In this part, we wanted to realize if we as a team have the characteristics to work cooperatively, for this reason we selected four characteristics of a successful collaborative work explained by Diaz (2004) to analyze the gathered information.

Subcategory 1. Cooperative skills.

Diaz (2004) conceives cooperation as a value where the members of the group offer support, challenges or assessment each other. Being coherent with the previous conception, data showed that each teachers meeting became in a space to share experiences, knowledge and fears in order to find support and design collaborative strategies to take over the teaching practice.

> "Teachers state that there was a good atmosphere to work together so that they participated actively and respectfully" Fourth survey.

Building a collaborative team is not an effortless project, especially in its first steps. Work from isolation to collaboration demands to break down some barriers, as it can be shown in our case. First, to accept that our colleagues' point of view is important, relevant and acceptable is not easy, because we used to work alone, with our own criteria, methodology and ideas about education. Second, to reflect together on our own difficulties and problems, creates a sense of fragility toward our own pedagogical practices. Nonetheless, it is not an excuse to avoid the collaborative work, but a reason to foster institutional pedagogical practices.

As a key point, teachers declare that working collaboratively is an opportunity to grow as professionals, because during the process we recognize each other as a subject of knowledge who contributes to our professional development. Related to this Lassonde (2009) claims

"participation in opportunities that result in the acquisition of new knowledge, understandings, skills, or strategies may enhance and build upon current knowledge." (p. 6)

It is relevant to point out that these teachers' meetings must be seriously organized to give educators actual academic topics to be analyzed, reconstructed and developed in their context to find solutions to real problems, on the contrary these meetings may become informal talks that can be worthless, and therefore the impulse of the team will decrease.

Subcategory 2. Positive interdependence.

Jacob et al. (2002) suggest the principle of positive interdependence is the most important of cooperative work because it represents a kind of feeling among the group, in other words what helps one group member benefits all the members and what hurts one member hurts them all. Related to this subcategory the participants agree that they learned from each other and also it was interesting to share their experiences and participate in the discussions to establish criteria to work together. A sense of mutual support was created.

Subcategory 3. Heterogeneity.

To quote Diaz (2004) Heterogeneity "fosters sharing, modeling, and scaffolding among all members of staff, contributing to their professional growth". As it was presented in the contextualization of the participants, the four English teachers have different characteristics in terms of pedagogical educational and experiential background. However, the leaders' researchers had not dimension the quality and importance of his/her contributions, as they have always been passive in their opinions in the language meetings. In this regard, this new proposal to work collaboratively creates a confident atmosphere where these valuable differences can arise to encourage educators to empower of the leader role that institution requires.

Subcategory 4. Accountability.

In this subcategory, the group of teachers highlight the importance of the responsibility when we work together in the planning, implementation and the evaluation. It is evidenced in their eagerness of continuing with teachers pedagogical discussions to reflect not only on reading but on the other skills. There is a commitment to participate in academic processes that encourage us to improve our teaching practices. In words of Diaz (2004): "responsibility gives teams coherence, supports cohesion, and helps keep member productive".

Category 3. Criteria to enhance reading.

Taking into account that our objective was to develop a collaborative teachers' proposal to enhance reading teaching practices at Manuelita Saenz School, the collected data provide us valuable information to build up the collaborative proposal bearing in mind two subcategories: Methodology and Brain Mind contributions.

Subcategory 1. Methodology.

As one of our starting findings, teachers recognized that our methodology has been organized bearing in mind just grammatical objectives, and this perspective is been reflected on our pedagogical practices in reading translation activities, the lack of contextualized texts and non-communicative objectives. That is why, it is necessary to change that paradigm for another closely to students' necessities, interests, using meaningful and communicative contexts that motivate them to read in an enjoyable environment.

Another element teachers consider relevant is the necessity of organizing reading workshops in a more effective way. Consequently, they propose to design reading workshops based on the three conditions posed in the Brain Mind Education model: Relaxed Alertness, Orchestrated Immersion and Active Processing, and related these conditions with the three

reading moments we have been using: Pre reading, while reading and post reading. It could be a good alternative to be aware of what we could implement to enhance reading process.

A constant teachers' concern is dealing with the low vocabulary students have. Accordingly, Educators perceive as an urgent requirement to redesign the English program taking into account the current English students' level. Furthermore, to emphasize on continuous activities that promote vocabulary building using mainly Brain friendly strategies since sixth to eleventh graders

Subcategory 2. Brain Mind Education contributions.

BME has allowed us to reflect on new Educational perspectives that in connection with our own experiences and knowledge have built up the whole proposal.

Bullying, threats, and teasing are part of our painful classroom realities. This huge issue concerns English teachers too. Being aware of that a negative learning environment affects student learning in many ways, such as low students achievement, inappropriate behavior, students anxiety, or depression, we consider that it is quite important to create in our classes the sense of a safe environment where students feel comfortable and confident to learn. (Relaxed Alertness)

The more connections the Brain does, the better comprehension people will have. As human beings, we apprehend the information with not only cognitive process but also including our emotions and feelings. During the research, process teachers found this element as a key BME contribution to enhance teaching practices. When students read a text and they make connections relating their senses, emotions and feelings, they feel the text closely to them and it becomes more comprehensible. Besides, to continue involving students in the learning process, the data showed that a self-evaluation at the end of each lesson is a powerful tool to help the brain to retrieve information and value the individual participation in the construction of knowledge.

BME provides the required organization to enhance reading in terms of three conditions where the reading process can be developed: Relaxed Alertness provides the necessary safe environment to learn, Orchestrated Immersion where we as teachers are concentrating on providing meaningful contexts and individual experiences to enhance knowledge and Active Processing, where students make an internalization and rearrangement of the content. (Jensen, 2008)

On the other hand, BME proposed some Brain Friendly strategies that teachers found meaningful and effective after the implementation of the workshops. For them these strategies are so interesting that they consider them as an essential element of the collaborative proposal. "It is necessary to adapt these brain friendly strategies and use them in reading activities". Fourth survey.

After analyzing collaboratively the data we as participants of the research process, propose the following schema as common criteria to enhance our reading teaching practices:

COLLABORATIVE PROPOSAL TO ENHANCE READING TEACHING AT MANUELITA SAENZ SCHOOL MORNING SHIFT

Criteria to select a text: Selecting a text must be a conscious process which starts bearing in mind communicative objectives instead of grammatical ones. Once we have established these objectives, teachers are encouraged to look for a text close to students' interests and needs, and in this way it will be more meaningful and contextualized to them. Another important aspect is related with the students' English level and the institutional requirements. As it is showed in the figure.

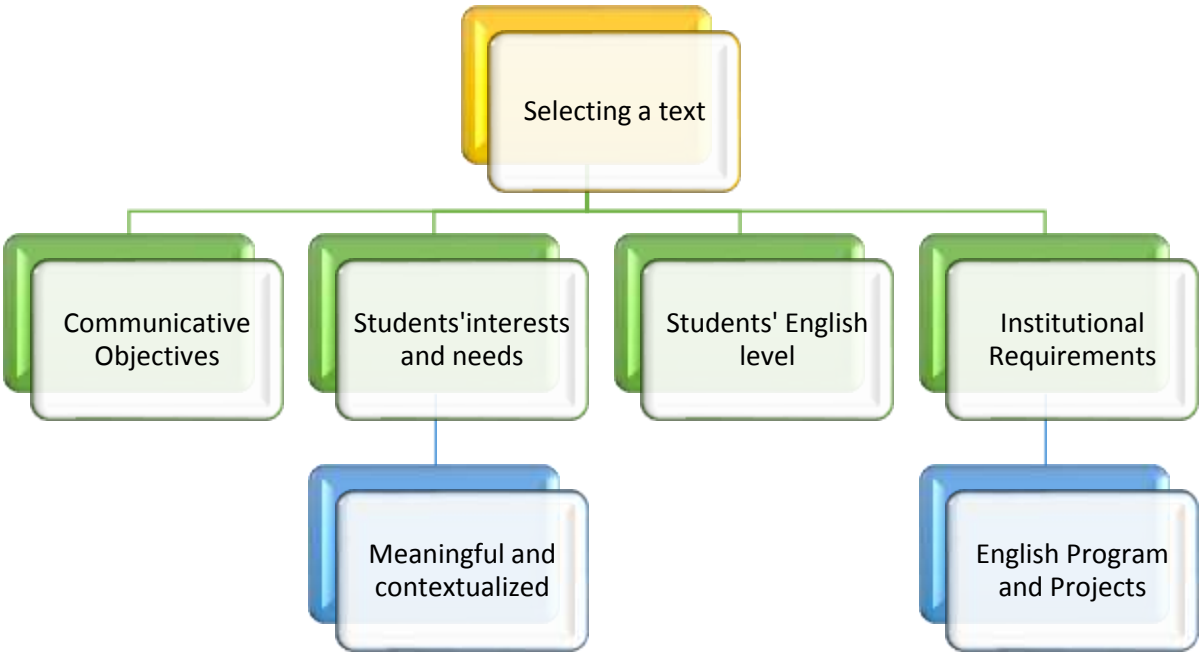

Figure 6. Process to select a text

Reading Process: In order to develop the reading process, teachers suggest to take into account the three moments posed by the BME model: Relaxed Alertness, Orchestrated Immersion and Active processing. Although we know that BME principles are interrelated continuously, the participants associate some principles with the three moments, for this reason, each moment is connected to some specific BME principles that enhance the teaching practices and help to design more effective activities to learn. Considering, that students are the center of the learning process. It is fundamental to create a learning scenario where they can learn effectively. With these elements in mind, teachers propose to follow three steps: pre, while and post reading using predominantly Brain friendly strategies.

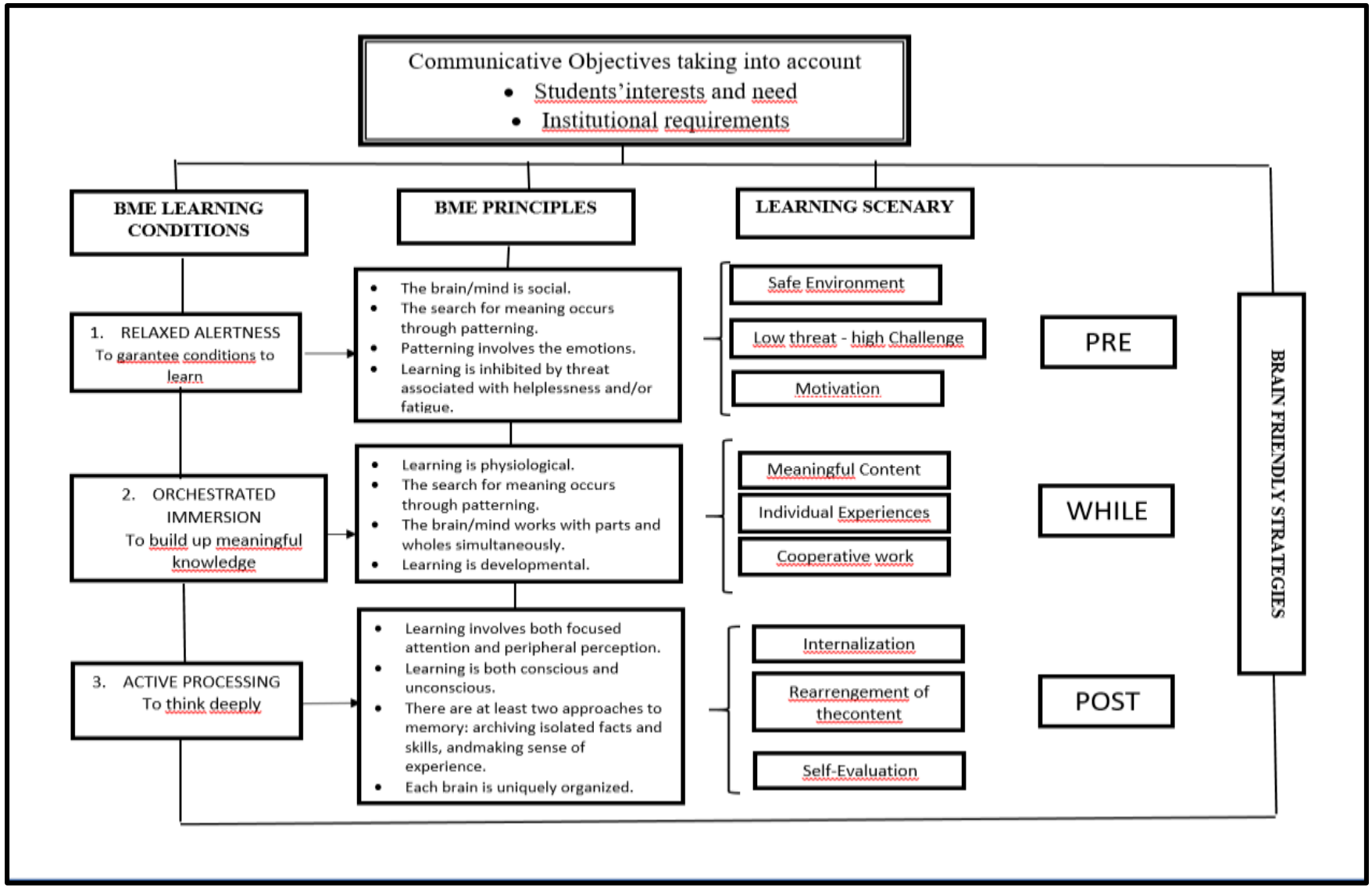

Figure 7. Collaborative Proposal to enhance Reading teaching practices.

CONCLUSIONS

The purpose of this study was to develop a collaborative teachers' proposal to enhance reading teaching practices at Manuelita Saenz School in order to face the problem stated at the beginning of the research process: the *unarticulated work among teachers that is evidenced in the lack of organized, clear and purposeful reading teaching practices.* During the investigation, the following conclusions emerged from the analyzed data.

Despite of the fact that teachers constantly reflect on their students' successes and failures, it has been growing a persistent paradigm of analyzing students' unexpected results bearing in mind just their academic performance. Maybe because of the National, local and even institutional policies persistently compare teachers´ practices with students' achievements. However, this process allows us to change our mind, and realize that the most important factor that is going to increase our students' achievements is ourselves. This process can be really enriched with a better and updated pedagogical practice supported in theoretical and practical knowledge and overall with peer accountability.

That is why, when teachers are encouraged to reflect on institutional dynamics, this consideration must begin on themselves. It is quite necessary to think of the coherence between what we have learnt and how this knowledge is reflected in our classes. In this sense, collaborative teaching work is an important alternative to build up a bridge to close the gap between our theory and our practice in an atmosphere of respectful criticism and a sense of mutual support.

Collaborative work is a wonderful opportunity to enhance teaching practices. Teachers can share their concerns and find out alternatives to propose possible solutions to improve

students' learning process. Even though it was not easy to listen to the other, to share ideas and to agree, a good atmosphere to work was consolidated during the process: Teachers respected each other and participated actively in the discussions, so that it is possible to continue working together with the aim of affecting not only our practice but the whole institution. Thus it could be concluded "the truly successful teachers (i.e., those whom we call experts or "master teachers") are those who constantly and systematically reflect on their actions and the consequences of those actions" Sagor (2000, p.14)

To grow up together is possible. During this study, to recognize and to value each other was a great experience since each person could contribute with his/her expertise to the process. Each teacher has a personal background that we did not know until this moment, consequently this process gave teachers' team the likelihood to enrich ourselves validating what teachers are. It was a serious academic process to grow professionally. Piggot (2012) has drawn attention to the fact that "achieving new levels of awareness both our own and others' perspectives, emerging as a courage is expressed and inquires leads to action."(p 98)

When teachers work in isolation, the institutional problems are seen unarticulated, unconnected and without context. In opposition, Collaborative work allows teachers to focus their efforts on crucial questions related to learning in order to generate different kinds of assessment, analysis of students' achievement, and strategies for improving results. In this specific case first, English teachers team can reflect on a specific problem that really concern us, then together build up a particular proposal close to our context taking into account four different points of view, sharing our own experience, strengthens, weaknesses and even our fears. It is relevant to say that it is a long way we have begun overcoming some barriers and we are aware that other ones are going to come up, but with consistency and commitment, the results will be improved in the benefit of our students and the whole institution. "Collaborative learning is

evident through collective knowledge creation whereby the participants of a learning community interact, engage in serious dialogue, and deliberate about knowledge, interpreting it communally and then distributing it among them." Wenger (1998)

A truthful Professional Development process can grow using collaborative work, since its objectives, methodology and assessment come from the teachers who are facing specific problems, and teaching to specific students. Therefore, every action will have sense and a specific purpose and its impact will measure on a real context, instead of the implementation of non-contextualized teaching professional in which a universal point of view far of the institutional realities as Díaz (2004) argues.

To learn collaboratively about BME was interesting because we discussed about how the brain learns and what could the possible contributions to our practices be. First, to understand how the brain learns allows us to propose more effective strategies to foster the learning process. On the other hand, to incorporate the senses, the emotions and feelings could enhance the reading process because students make more connections to understand the text better. However, after teachers' reflections, we realized that BME could enrich the learning process as a whole, not only reading because it has to do with engagement, strategies and principles that are related with the learning from an integral viewpoint. "Brain-based education is about the professionalism of knowing why one strategy is used instead of another. The science is based on what we know about how our brain works" (Jensen, 2008 p. 4)

FURTHER RESEARCH

Based on the results of this research, we suggest:

To enhance Collaborative work must be an institutional concern. Transversal projects may give the framework in which teachers from all subjects can discuss, share experiences and knowledge and look for new and appealing strategies to improve students' achievements. Furthermore, having common criteria will give students a sense of unity that leads them to achieve common objectives.

To go deeper on the knowledge of BME with the aim of finding new elements to enhance teaching practices. It would be interesting to consider the elements given by BME to enrich the learning process from a cross-curricular perspective, where teachers of any subject could use and implement BME to improve students' learning process.

As this research was mainly based on teachers' perceptions, it would be relevant to know the students' point of view regarding the implementation of Brain Mind Education and its possible impact in the learning process as well as in their academic achievements.

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